April 14, 1942. A. J. DIECKMANN 2,279,449

KEY CONTAINER

Filed Feb. 15, 1941

Fig. 1.

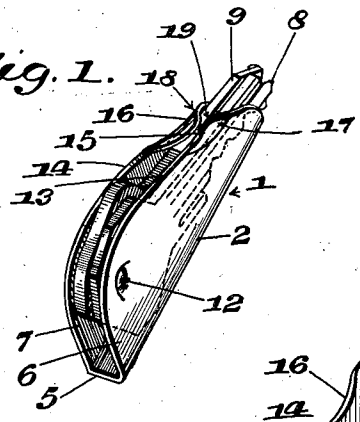


Fig. 2.

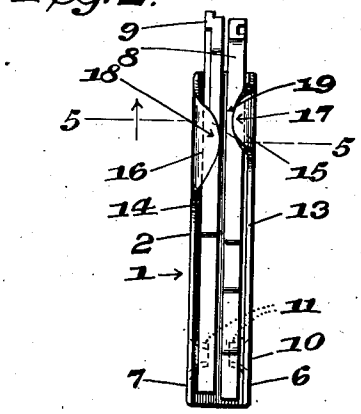


Fig. 3

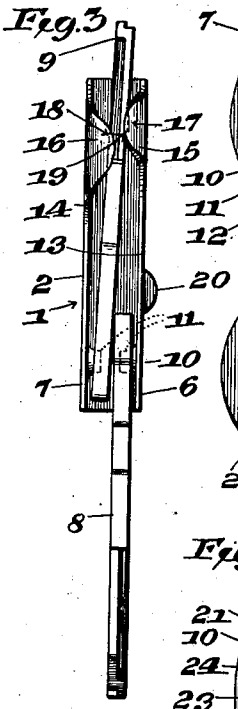


Fig. 4.

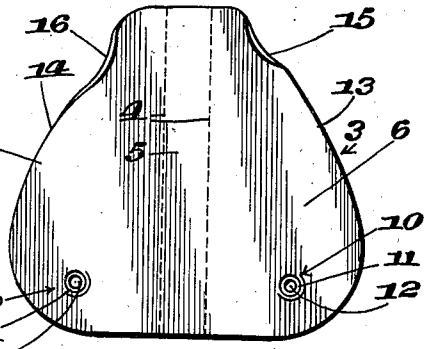


Fig 6

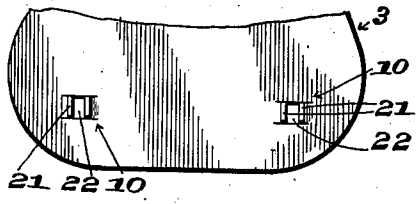


Fig 5.

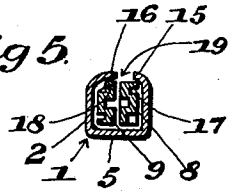


Fig 8.

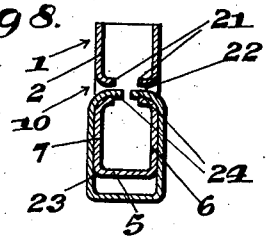


Fig 7.

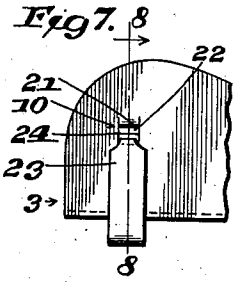
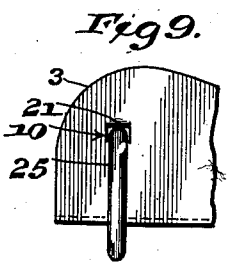


Fig 9.



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UNITED STATES PATENT OFFICE

2,279,449

KEY CONTAINER

Armin J. Dieckmann, Saginaw, Mich.

Application February 15, 1941, Serial No. 379,138

5 Claims. (Cl. 70—456)

This invention relates to improvements in key containers such as are customarily carried in one's pocket, the particular purpose to which the instant container is adapted being that of carrying an important pair of automobile keys. While this is the stated purpose of the invention its meaning is not to be construed as a limitation upon the use of the container because, obviously, any selection of keys whatsoever may be fitted into the container and made to function upon the novel and underlying principle of the invention.

The latter is characterized by a contrivance, conveniently designated a case, which because of its desirably being made of metal or some equivalent plastic substance that has a considerable factor of resiliency, is subject to restoration to its original cross-sectional U-shape when the keys are clipped in, in which position they are held quite loosely but are retained from swinging out by crimps on the margins of the case sides, said crimps being shaped to virtually compel the displacement of the keys into operative positions in a prescribed order. With this preamble in mind the objects of the invention are as follow:

First, to provide a key container which will effectively hold a pair of keys in a sheathed position in the case without the use of screws or equivalent contrivances which are apt to come loose.

Second, to provide a key container in which a pair of automobile keys are held with inherent looseness but kept in place in the container by a pair of marginal crimps which make it necessary to exercise some force upon the keys in order to displace them from the case into the exposed working position.

Third, to provide a key container of the foregoing character wherein one of the crimps is smaller than the other thereby overhanging one of the keys to an extent greater than the other, enabling swinging the first key out of the container by a slight pressure on its exposed end with comparative ease to be followed by the second key which then has ample room for swinging out, said second key being initially blocked against swinging out by the obstructions afforded both by the first key and by the larger overhanging crimp.

Other objects and advantages will appear in the following specification reference being had to the accompanying drawing, in which:

Figure 1 is a perspective view of the improved key container, particularly illustrating the two bends or marginal crimps of different sizes.

Figure 2 is an edge view of the key container illustrating the overhanging relationship of the crimps to the keys.

Figure 3 is a similar edge view illustrating the succession of displacing the two keys.

Figure 4 is a plan view of the case blank prior to bending it into its U-form.

Figure 5 is a cross section taken on the line 5—5 of Fig. 2.

Figure 6 is a detail plan view of a portion of the blank in Fig. 4, illustrating a modification in the form of the lugs which coact to swingably hold the keys.

Figure 7 is a detail side elevation of a portion of a container constructed in accordance with Fig. 6, illustrating the use of a supplemental holding clip.

Figure 8 is a cross section taken on the line 8—8 of Fig. 7.

Figure 9 is a detail side elevation of a portion of a container constructed in accordance with Fig. 6, illustrating the use of a round link to keep the keys in place.

The key container, generally designated 1 in all forms of the invention, consists of a cross-sectionally U-shaped case 2 which is intended to be made of relatively thin stock either of metal or a sufficiently strong plastic substance such, for example, as Celluloid. Any chosen substance desirably has a degree of resiliency. This quality comes into evidence mainly upon displacing the first key and to some extent upon displacing the second key. Otherwise said quality is not essential because the keys are intended to hang loosely in the container and are not intended to be gripped by the sides of the case.

In making the case 2 the blank 3 (Fig. 4) is stamped out of the chosen material. This blank is bent along its longitudinally central region along a pair of parallel lines 4 which demarcate a back or bottom 5 and a pair of sides 6, 7. The eventual bending of the blank gives the case 2 the cross-sectionally U-shape referred to and illustrated, the sides 6, 7 and back 5 substantially sheathing the two keys 8, 9. These keys, in the order named, are herein regarded as the ignition and trunk keys of an automobile. Obviously they are the most important keys used in conjunction with an automobile, and since the ignition key 8 is used much more frequently than the trunk key 9, the container 1 is so made as to render possible the displacement of the ignition key from the case without having to look at the container.

Toward the purposes stated, the blank 3 is punched at two places designated 10, providing confronting lugs 11 on which the keys are pivoted. These lugs may be as high as required, and are punched through with holes at 12. The respective margins 13, 14 of the sides 6, 7 are bent at 15, 16. These bends are in the nature of crimps or lips which overlap or overhang the top edges of the two keys 8, 9 in the manner shown in Figs. 1, 2 and 5.

The crimp 15 is slight when compared with

the crimp 16, thus effecting a correspondingly slight overhang at 17. The overhang 18 of the crimp 16 is far greater, extending substantially the distance of the full thickness of the key 9 and perhaps even a little more, whereas the overhang 17 occupies only a small fraction of the thickness of the key 8. The result of the confronting relationship of the crimps 15, 16 is a passageway at 19 a little less in width than the keys 8, 9 are thick.

When the keys 8, 9 are sheathed in the case 2 as in Fig. 2 the crimp 15 functions much on the order of a spring latch with respect to the key 8. Although the two keys are contained loosely by the case 2, yet they are kept in the sheathed position because of the minor obstruction at 15 and the major obstruction at 16. Since the tips of both keys project beyond the small end of the case 2 the user can readily manipulate the thumb of one hand to swing the key 8 forwardly.

Now it requires only a small amount of force to move the key 8 past the crimp 15. The latter, with the resiliency of the side 6 behind it, yields quite readily to allow the displacement of the key 8 into the position shown in Fig. 3. Up to this time the trunk key 9 was effectually blocked from displacement both by its overhanging crimp 16 and the obstruction beside it in the form of the key 8. But upon displacement of the latter (Fig. 3) the passageway 19 is laid open for the sequential displacement of the trunk key 9. The keys are replaced in the reverse order of their displacement. In other words, the key 9 is snapped in first whereupon the key 8 follows, snapping past the crimp 15 to its held position. Thus it will be understood that the keys are swung much on the order of the blades of a pocket knife, but contrary to the principle of the latter it is here necessary to swing the ignition key 8 out first before the trunk key 9 can be swung out. When the ignition key is out, the trunk key is still held loosely in the container by the two crimps.

In Fig. 6 the punched places 10 are produced with a cross-sectionally rectangular instrument. The result is pairs of lugs 21 at each hole 22. These lugs assume confronting relationships when the blank 3 assumes its case form (Fig. 8), and the two keys are adapted to swing upon the composite pivot thus provided, the same as in Fig. 2. The form of lugs 21 (Fig. 6) has its preference over the form in Fig. 4 from the standpoint that clip 23 is applicable to slightly better advantage. Such a clip could be anchored at the holes 12 in Fig. 4, but the rectangular formation of the holes 22 are better adapted to the cross-sectionally rectangular shape of the tips 24 of the clip 23 as is readily seen in Fig. 7.

The purpose of the clip 23 is to hold the keys in place, the tips 24 being made long enough to substantially or entirely bridge the internal distance so that there will not be any space through which either one of the keys may inadvertently slip off. This retaining function is also imposed upon a round link 25 as seen in Fig. 9. This link is initially open but by spreading it the requisite distance its ends can be released into the holes 22, whereupon the two keys will be held in place permanently. In each case the clip 23 and link 25 are to hold the keys in their swinging position. Said clip and link can swing free and easy and in practice are optionally made of either resilient or merely bendable material.

I claim:

1. A key container comprising a case for partially sheathing at least two keys, means embodied in the case upon which the keys are loosely held for eventual swinging out of the case into operative positions, and means on the case correlated with the keys for compelling a sequential displacement of the keys into said operative positions.

2. A key container comprising a case for partially sheathing at least two keys, means embodied in the case upon which the keys are loosely held for eventual swinging out of the case into operative positions, and means projecting from the case and extending different distances into the possible paths of swinging of the keys, constricting the available space for swinging and compelling the swinging of the keys one at a time into said operative positions.

3. A key container comprising a case of U cross-section thus delineating a bottom and a pair of sides, means embodied in the sides, assuming a confronting relationship to constitute a pivot on which at least two keys are swingable from a loosely sheathed position within the confines of the sides, the tips of said keys projecting beyond an end of the case thus to be accessible to finger pressure for swinging the keys out of the case into exposed operative positions, and a crimp on the margin of each of the sides, said crimps being directed inwardly of the case to overhang the edges of the keys directly thereunder, one of the crimps being substantially as wide as the respective key is thick thus to obstruct the movement of said key when the other key is still in place, the crimp overhanging the other key being only a fraction of the thickness of said other key thus to serve as a readily deflectible latch.

4. A key container comprising a case of U cross-section thus delineating a bottom and an upstanding pair of sides, lugs on the interior of the sides, consisting of punchings having holes and providing confronting supports on which at least two keys are pivotally swingable from a loosely sheathed position within the confines of the sides, and inwardly directed crimps on the margins of the sides, one of the crimps extending approximately half the distance across from one side to the other, the other crimp extending across said distance an amount approximately equal to the thickness of the respective side, said crimps being in confronting relationship and defining a passageway slightly less in width than the thickness of one key.

5. A key container comprising a case for partially sheathing at least two keys, said case being of U cross-section and having confronting punchings on which the keys are loosely swung, a clip of stiff material embracing a portion of the case and having confronting tips fitted in the punchings from opposite sides of the case to augment the pivotal function thereof, and means staggered on the case and correlated with the keys for compelling a sequential displacement of the keys when said keys are moved out of the case.

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