

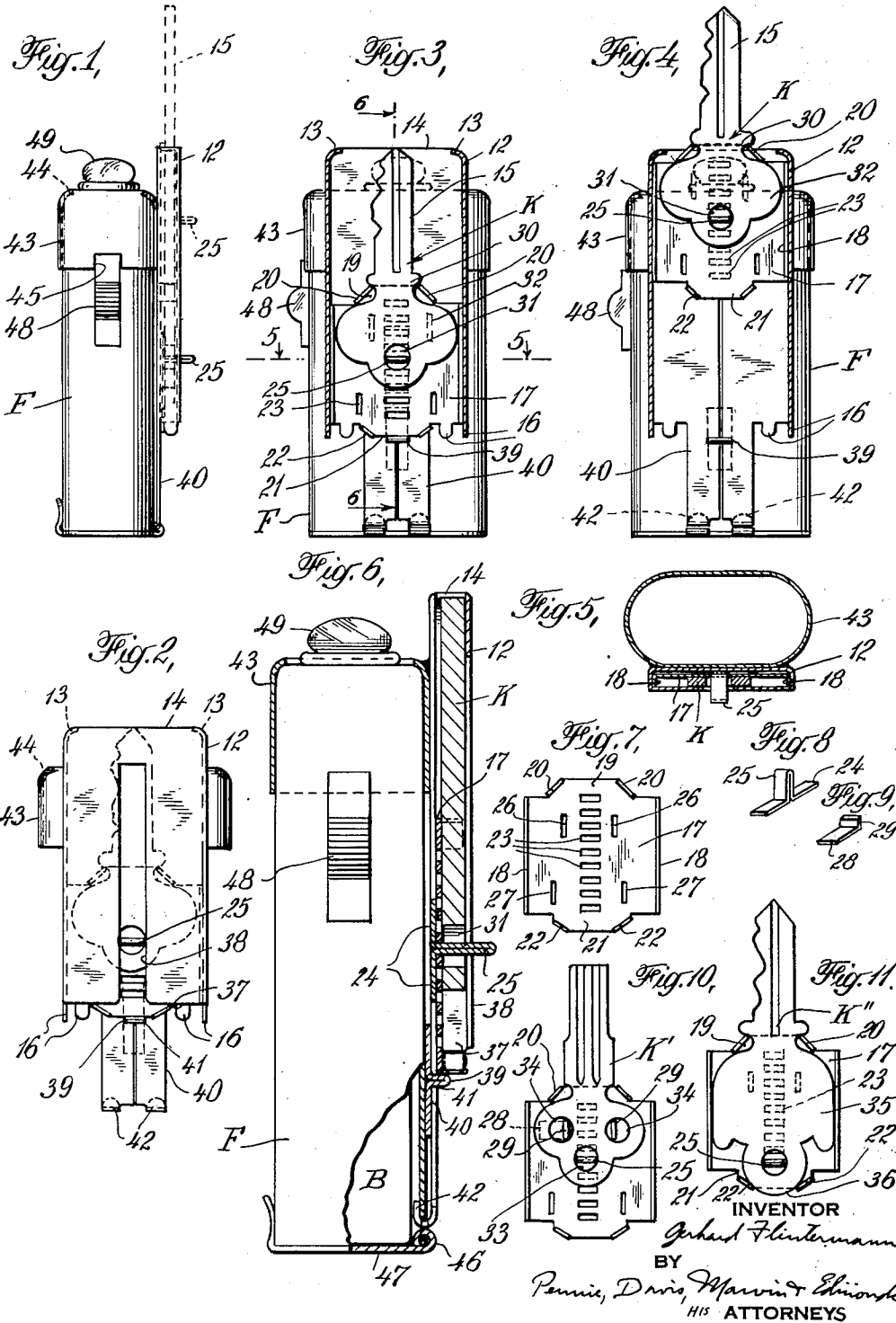
Sept. 11, 1934.

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1,972,880

KEY CONTAINER

Filed April 2, 1932



UNITED STATES PATENT OFFICE

1,972,880

KEY CONTAINER

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Application April 2, 1932, Serial No. 602,766

3 Claims. (Cl. 59—96)

This invention relates to a key container and more particularly concerns a container of this type which is so designed that the tang of the key may be extended from the container for use in a lock when desired.

It is usually necessary to use a particular key frequently, such as a door or latch key, and it is desirable to have this key so arranged that it can be distinguished from other keys so that searching and fumbling among other keys for the proper one will not be necessary.

It is an object of the present invention to provide a key container for individually housing a key and from which this key may be so extended that it can be used in a lock, the container acting as an enlarged handle for the key whereby the key may be easily manipulated. A further object of the invention resides in the provision of a container of the type described which is readily adjustable to accommodate keys of different sizes and with different shapes of heads.

The above and other objects of the invention are carried out by providing a key container comprising a flat somewhat elongated metal casing having an opening along one end surface thereof and a sliding element therein bearing the key. A thumb knob or button connected with the slider projects through a slot in the casing and when this knob is moved forwardly, the tang or shank of the key projects through the opening in the casing and is ready for use in a lock. The head of the key is held rigidly against turning in the casing when the tang is extended and thus the casing serves as a convenient enlarged head or handle for turning the key in a lock. When the tang or shank of the key is withdrawn into the casing, the casing forms a compact and attractive container which may be carried in a pocket or purse without wearing a hole in the pocket or purse lining as frequently occurs when a sharp-edged key is carried therein.

All key heads are provided with one or more openings, and these openings may be of various shapes and sizes and may be variously located with respect to the tang or shank of the key. The key container of the present invention incorporates an improved slider for carrying the key head within the casing, this slider including one or more lugs which are passed through the opening or openings in a key head to lock the key against movement relative to the slider, the protruding end of at least one lug extending through a slot in the casing and acting as the knob or button by means of which the key tang is projected from the casing. The slider is so con-

structed that the lug may be secured thereto at a large number of spaced points, whereby this lug may pass through the key head openings of all designs of keys regardless of the location of the key head opening.

The key container may be carried as a unit or, if it is desired to illuminate the keyhole, the container carries a clip adapted to be mounted on a pocket flashlight. This clip is secured to the flashlight in such a way that when the tang or shank of the key is projected from the casing in the manner described and directed toward the keyhole, the light from the flashlight is directed in the same direction so that the keyhole can be readily located.

The invention will be best understood by reference to the accompanying drawing which illustrates a preferred embodiment thereof. In the drawing;

Figure 1 is an edge elevation of a key container embodying the present invention and applied to a flashlight;

Fig. 2 is a side view of the key container shown in Fig. 1;

Fig. 3 is a side view of the device of Fig. 1 with the key container shown in section;

Fig. 4 is a view similar to Fig. 3 showing the key tang extending from its casing;

Fig. 5 is a sectional view taken along the line 5—5 of Fig. 3;

Fig. 6 is an enlarged sectional view of the key container;

Fig. 7 is a plan view of the key carrying slider;

Fig. 8 is a perspective view of the slider lug which acts as the knob or button for moving the key in the casing;

Fig. 9 is a perspective view of another type of slider lug; and

Figs. 10 and 11 are plan views of the slider with different types of keys connected thereto.

Referring to the drawing, the key casing of the container is shown at 12. The casing is preferably formed of sheet metal and is the general shape of a rectangular tube, as shown in Fig. 5. One end of the casing is provided with ears 13 bent inwardly to define an opening 14 through which the tang 15 of a key K may be extended, as hereinafter described. A plurality of tabs 16 extends from the opposite end of the casing and are adapted to be bent across the adjacent casing opening 37 to retain the key slider in the casing.

A slider 17 is provided as best shown in Figs. 3, 4 and 7. This slider is preferably formed of sheet metal and the opposite sides thereof are turned up to form parallel flanges 18 which fit

snugly against and slide along the inside edge walls of the casing 12, as shown in Figs. 4 and 5. The forward end of the slider 17 is provided with a narrow extension 19 having two upturned diagonally extending flanges 20 on the opposite sides thereof, and a similar extension 21 with diagonal flanges 22 is provided on the rearward end of the slider.

A plurality of substantially rectangular transversely extending spaced openings 23 are formed in the slider 17 along the central portion thereof, as shown in Fig. 7. A strip 24 is provided, having its central portion bent up to form a lug 25 which is insertable in any one of the openings 23, as best shown in Figs. 6 and 8. Two or more pairs of longitudinally extending rectangular openings 26 and 27 may also be formed in the slider 17, the two openings of each pair being respectively located on opposite sides of the row of central openings 23. Suitable strips 28 having short upstanding lugs 29 thereon are provided for insertion in the openings 26 or 27.

The key K is mounted on the slider 17 with the throat 30 of the key fitting between and resting against the flanges 20 of the extension 19, the flanges holding the key throat against lateral movement. With the key thus positioned, the central opening 31 in the head 32 thereof is aligned with one of the openings 23 in the slider 17, and the lug 25 of the strip 24 is passed through these aligned openings whereby the key head is locked against longitudinal movement relative to the slider. In this manner, the key head is securely anchored in the slider with the tang or shank 15 extending beyond the end of the slider, as shown in Figs. 3 and 4. Regardless of the distance between the throat 30 and the head opening 31 of the key, this opening is always aligned with one of the plurality of spaced openings 23. Thus, any conventional kind of key may be carried in the improved container, the throat 30 of the key being inserted between the flanges 20 and the lug 25 being passed through the particular opening of the group 23 which is aligned or substantially aligned with the central key head opening 31.

Some keys are provided with a plurality of openings in their heads. Thus the key K', shown in Fig. 10, has three openings, a central opening 33 and two spaced openings 34. When this type of key is used, the lug 25 is passed through the central opening 33 in the manner described above and the lugs 29 of two strips 28 may be passed respectively through the two openings 26 and the aligned spaced openings 34 of the key head. Another type of key designated K'' and shown in Fig. 11, may be secured in the slider 17 by the lug 25 alone, the outer end 36 of the key head 35 resting against flanges 22 on the rearward extension 21 of the slider 17.

The slider 17 with the key K mounted thereon is inserted tang first into the casing 12 through the opening 37 in the rearward end thereof, the lug 25 passing into a longitudinal slot 38 in the casing. With the slider 17 and the key K inserted in the casing, they may be locked therein by bending the tabs 16 across the opening 37. In lieu of so bending the tabs 16, a lug 39 may be inserted through an opening 41 in an extension 40 of the casing wall, this lug acting to prevent the removal of the slider 17 from the casing, as shown in Fig. 6.

In operation, the casing of the key container is held in the palm and the lug 25 is advanced within the slot 38 of the casing 12 by the thumb or

finger so that the tang or shank 15 of the key K is projected through the opening 14 in the front end of the casing 12, while the head 32 of the key is locked within the casing 12, its outward movement being limited by the engagement of the lug 25 with the end of the slot 38 and/or by the engagement of the slider 17 with the ears 13 forming the tang outlet opening 14. When the tang of the key has been projected from the casing 12 in the manner described, it may be readily inserted and turned in the lock, the casing 12 providing an enlarged and easily operable handle whereby greater force may be exerted on the key than is available when the usual small key head is employed as a handle. When the key shank is returned within the casing 12, the slider 17 fitting frictionally within the casing 12 serves to retain the key within the casing against undesired extension therefrom when the key is not in use.

When the key casing 12 is mounted on a flashlight, the sheet metal blank from which the casing 12 is formed is provided with mounting means or clips, which include a flat extension 40 having the two tabs 42 formed on its lower end and a tubular sheet metal band 43 soldered or otherwise secured to the inner surface of the casing 12 near its upper end. This tubular band 43 is also formed of sheet metal and its upper edge is turned inwardly as indicated at 44 in Fig. 1. This band 43 is shaped to fit the particular kind of flashlight housing upon which the key container 12 is intended to be mounted, and the tabs 42 of casing extension 40 are also shaped and arranged to conform to this particular form of flashlight casing. The lower edge of the band 43 is also provided with a slot 45 for the reception of the flashlight button. In mounting the casing 12 on the flashlight housing F, shown in Figs. 1, 3, 4, 5 and 6, the band 43 thereof is passed over the front end of the flashlight housing F and the tabs 42 on extension 40 are inserted in the openings provided in the flashlight housing F for the hinge barrel 46 of the movable bottom 47 of the flashlight housing F. Obviously, other forms of mounting clips for the casing 12 will be necessary when it is to be mounted on different forms of flashlights. When the novel key container is mounted on the flashlight F in the manner described, the subsequent insertion of the dry cell B through the open bottom of the flashlight housing F bends the tabs 42 up against the inner surface of the housing and securely locks the key container thereon. When the flashlight button 48 is manipulated, the slot 45 on the band 43 accommodates the forward movement of the button 48.

In operation, the illuminated key container of this invention is held in the hand and if the keyhole of the lock is located in a dark place or it is desired to manipulate the lock in the night time or the keyhole is otherwise difficult to find, the user projects the tang or shank 15 of the key from the key casing 12 by advancing the lug 25 and illuminates the flashlight by manipulating button 48. It will be seen that the tang of the key lies in the light zone cast by the lamp 49 of the flashlight and that the key may be readily directed into the keyhole. The flashlight housing F and the casing 12 form a readily gripped handle for the key, so that it may be turned easily even in a stubborn lock. After the key has been used in the lock, the user turns off the flashlight and retracts lug 25 to withdraw the tang 15 of the key K within the key casing 12.

I claim:

1. In a key container for carrying a key of the type having a throat and an opening in the head thereof, a casing having a key tang opening therein, a slider carried within said casing and slidable toward and away from said opening, means on said slider for engaging the throat of a key, said slider having a plurality of openings therein spaced at different distances from said throat engaging means and a member insertible through any one of said slider openings for engagement with the opening in a key head whereby key heads having variously spaced openings and throats may be connected to said slider.

2. In a key container for carrying a key of the type having an opening in the head thereof, a casing having an opening therein, a key carrying member in said casing slidable toward and away from said opening whereby the tang of a key carried by said member may be extended out through said casing opening and retracted within said casing, and means, adjustably connected to said member at any one of a plurality of points, for engagement with the opening in a key head where-

by the key may be anchored to the member, said casing having a slot therein through which said key head opening engaging means protrudes for manipulation of the member from the exterior of said casing.

3. In a key container for carrying a key of the type having a throat and an opening in the head thereof, a casing having an opening therein, a key carrying slider in said casing slidable toward and away from said casing whereby the tang of a key carried by said slider may be extended out of said casing through said opening and retracted within said casing, means on said slider for engaging the throat of a key, said slider having a plurality of openings therein spaced at different distances from said key throat engaging means, and a lug insertible in any one of said slider openings for engagement with the opening in the key head whereby key heads having variously spaced openings and throats may be anchored to the slider, said casing having a slot therein through which said lug protrudes whereby said lug may be employed to move said slider.

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