Aug. 4, 1942. R. HENDERSON 2,291,896

HOLDER FOR KEYS OR THE LIKE

Filed May 4, 1938

Fig. 1.

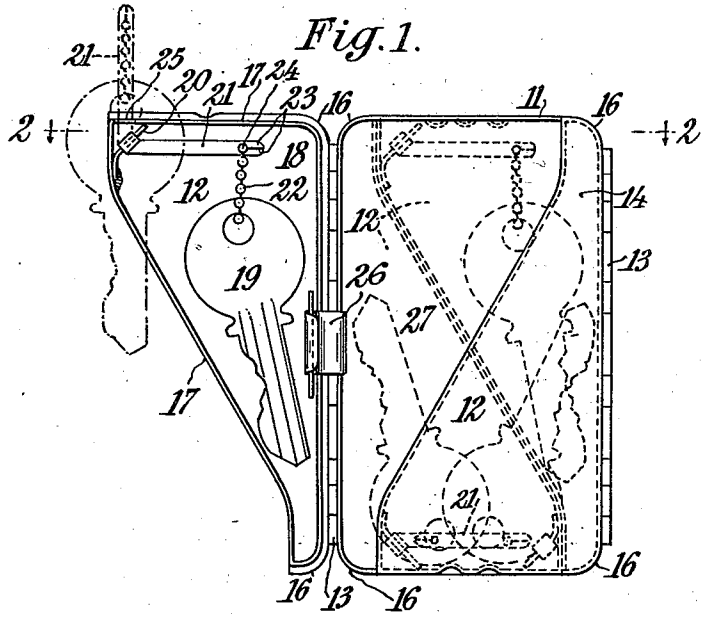


Fig. 2.

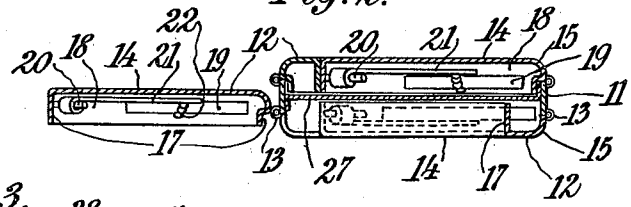
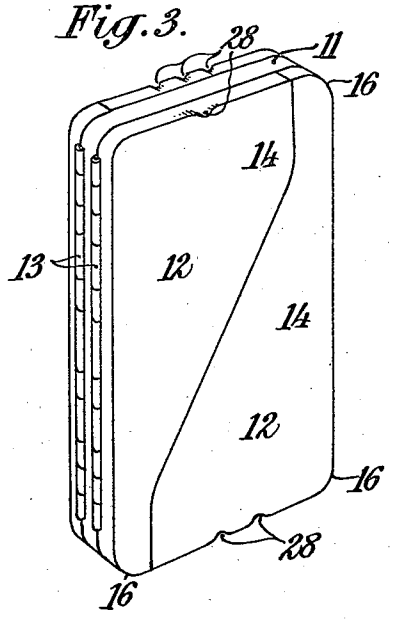


Fig. 3.



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HOLDER FOR KEYS OR THE LIKE

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15 Claims. (Cl. 70—456)

This invention relates to improvements in holders for keys or the like, and is particularly useful as embodied in holders adapted to accommodate a plurality of keys.

One important object of the invention is the provision of a holder with means for accommodating a plurality of keys, in which the act of opening the holder serves to uncover a selected one of the keys within the holder and render it separately available for use.

Another object is the provision of such a holder having improved means which enable a user, guided solely by the sense of touch, to select and withdraw a particular key from the device.

Another object is the provision, in a key holder, of improved means for fastening a key thereto.

Other objects will be apparent from the following description of the invention.

A preferred embodiment of the invention, selected from among numerous possible embodiments for purposes of illustration, is shown in the accompanying drawing, in which:

Figure 1 is a front view of such selected embodiment, the device being open, whereby to render one of a plurality of keys available for use.

Fig. 2 is a sectional view on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the selected embodiment, the device being closed.

The device may comprise a substantially rigid, open, rectangular frame 11, to opposite sides of which a plurality of key-carrying sections 12 may be pivotally attached as by hinges 13. The sections 12, in the illustrated embodiment, are four in number, arranged in complementally shaped pairs on opposite sides of the device. Various shapes may be employed in the design of said key-carrying sections, but when they are substantially triangular in shape, as illustrated, certain advantages are derived, as will hereinafter appear.

The four key-carrying sections 12 are preferably substantially alike. Each is preferably substantially rigid and may comprise a body portion 14 of suitable sheet material, preferably rounded at the outer edges as at 15 and at the corners adjacent the hinges as at 16. The section 12 has an inwardly extending flange 17, which may extend substantially about the periphery of the body portion 14. The said flange may normally nest within the frame 11, and may contribute to the formation of an inner recess 18 within which a key 19 may be accommodated. The parts of said flanges which extend along the hypotenuse of each of the two sections 12 constituting a pair, preferably lie intimately alongside each other when said sections are in closed positions and extend diagonally across the device. The diagonal extensions of said flanges on opposite sides of the device preferably cross as best seen in Fig. 1.

Each of the key-carrying sections 12 is provided with suitable means for securing a key thereto. A means well suited to this purpose may comprise a pivot pin 20, preferably welded or otherwise fixed in the inner side of the outer corner of the section 12, on which pivot pin may be pivotally mounted an arm 21, to the free end of which the key 19 may be releasably fastened by any suitable flexible means such as a chain 22 or an equivalent flexible joint, cord, wire, or the like. The chain 22 may, for example, be a ball chain and may be held between somewhat resilient fingers 23 at the free end of the arm 21, and a recess 24 may be provided at the juncture of said fingers, within which recess the chain 22 may be securely held. Any suitable means, likewise, may be employed for fastening the chain to the key.

As illustrated, the pivot pin 20 is fixed at an angle of about 45° and the pivotal mounting of the arm 21 holds said arm at an angle of about 45° relatively to said pivot pin. It results that the arm 21 with the key attached thereto may be swung from a horizontal position within the recess 18 to a vertical position substantially outside of the key-carrying section 12, as indicated in broken lines in Fig. 1, so that the key may readily be used without detaching it from the device. The flange 17 is preferably cut away as at 25 to permit the arm 21 to swing, without obstruction, to the indicated upright position.

The sections 12 may be held closed by the frictional engagement of the flange 17 with the adjacent inside surfaces of the frame 11, but means are preferably provided for yieldably holding the key-carrying sections in either closed position or open position. One or more suitable springs 26 may be employed in conjunction with the hinges 13 for controlling, in a well-known manner, the pivotal movements of the section 12 so that when the said section is manually moved beyond an intermediate point it will be urged by said spring to the nearer of either a fully open or fully closed position and held in such position until said section is again manipulated. Such spring means are commonly used in eyeglass cases and similar articles, and no specific claim of invention is now made thereto.

The disposition of three keys remaining with-

in the device, after the one has been selected and withdrawn, is indicated in broken lines in Fig. 1, from which it will be observed that in a device, as thus far described, the diagonally extending flange or flanges on one side of the device extend across and hold the key or keys in their respective recesses 18 in the key-carrying sections 12 on the other side of the device, thus obviating any possibility of the several keys becoming entangled or of being unintentionally withdrawn from the device. A thin partition 27 may, if desired, be extended centrally within the frame 11 whereby to afford a further safeguard against entanglement of the keys. Such a partition may be welded, glued or otherwise secured to the inside surface of said frame, the mode of securing said partition in place depending largely upon the material used.

Where, as recommended, the several sections 12 are substantially alike, means for distinguishing the said several sections should be provided. While such means may be merely visible, it is preferred that they be distinguishable also by the sense of touch so that a desired key may readily be selected and withdrawn for use when no light is available. One means to this end may comprise recesses or notches 28 of sufficient proportions to be readily distinguished by touch. One or more of these recesses 28 may preferably be pressed or cut into the top or other edge of each section 12, the said four sections each being provided with a different number of such recesses As disclosed herein, one section 12 has one such recess, another section has two, another has three, and another has four recesses. Other indicia, responsive to touch, may also be employed instead of such recesses.

The hinges 13 may, if desired, be designed to lie flush with the frame 11 and the adjacent portions of the key-carrying sections 12 and thus contribute to a smooth exterior of the device. The words "hinges," "hinged" or "hingedly" are employed in this specification and in the appended claims in a broad sense to include a fold or any other structure permitting relative movement of two or more key-carrying sections about a common axis.

It is obvious from the foregoing description that the sections 12 function as covers for a key compartment or compartments and that the opening of one of the sections 12 renders only a certain key or keys available for use to the exclusion of all other keys within the holder. Although it is, of course, preferable to fasten the keys to the sections 12 so that the opening of one of the latter actually withdraws a selected key from within the holder, nevertheless, the keys, if desired, may be so mounted at any available mounting point within a key compartment that when the cover of that compartment is opened the key therein is rendered accessible for use to the exclusion of keys in the other compartments.

A key holder according to this invention may be about the same size as key holders previously developed, and may even be made somewhat smaller by suitable designing. When taken from the user's' pocket, it should be held in the hand with the section 12 carrying the selected key toward the top of the device as viewed by the user. The said section may then be turned to an open position as shown in Fig. 1, whereupon a slight, rapid, jerky motion of the hand and holder upwardly and then downwardly serves to throw the arm 21 and the key out of the recess 18, in which position the key is available for use.

Some may prefer to turn the section 12 back to closed position before using the key, the latter and the arm 21, for this purpose, being left extending out of the device. Such use may often be found desirable as when an automobile key is to be used and the key holder is to be left hanging from the key being used. As so used the compact, closed key holder presents a neat appearance and would not materially cover or obscure the automobile panel. The key, of course, may be replaced in the holder by reversing the operations or movements hereinbefore outlined.

The device may be made of any suitable material such as sheet metal, moulded rubber, moulded plastic material, or the like, or the sections 12 may be open frames across which leather, fabrikoid or the like may be extended and suitably secured. Said sections, particularly those formed of sheet metal, may be lined with velvet or other suitable material for preventing rattling of the keys. The partition 27 may be a web of any thin material.

In this specification and in the appended claims the words "open," "open position," or "openable" are used with reference to the position of a key-carrying section in which it is substantially clear of other sections or of other parts of the device, so that a key, related to such section, may be swung substantially clear of the device to permit its use in a lock or with reference to the movement of a section to such position. The words "closed" and "closed position" refer to the position of a key-carrying section in which it is in such intimate relationship to other portions of the device that a related key may not be moved from a non-usable to a usable position or vice versa. The words "usable position" refer to a position of a key wherein it is sufficiently clear of all parts of the device that it may be used conveniently in a lock and the words "non-usable position" are used to refer to a position of a key wherein it is held within the device or in such close relationship thereto that it may not be used conveniently in a lock.

It should be understood that the embodiment shown in the accompanying drawing and described herein is only illustrative of the principles of this invention, which may be practiced in many embodiments without departing from the invention as defined in the accompanying claims.

What I claim is:

1. A holder for keys or the like, comprising a plurality of hingedly-connected key-carrying sections, any one of which is adapted to be opened without opening any other of said sections, pivotal attaching means on each said section for attaching a key thereto while permitting movement of the key from a non-usable to a usable position and vice versa, and key-confining means adapted to retain keys, attached to closed key-carrying sections, in non-usable positions with respect to the holder, whereby a key on any one of said sections may be made available for use in a lock by opening the section to which said key is attached, while keys in all other of said sections are securely held in non-usable positions.

2. A holder for keys or the like, according to claim 1, the said key-carrying sections being arranged in one or more complementally shaped pairs, the constituent sections of a pair being disposed in a common plane and constituting a side of said holder.

3. A holder for keys or the like, according to

claim 1, the said sections having recesses for accommodating the keys, and two of said sections being disposed on each of two opposite sides of the holder, each of said sections substantially overlying both said sections on the opposite side of the holder whereby to hold keys, attached to said oppositely disposed sections, within their respective recesses.

4. A holder for keys or the like, comprising a plurality of hingedly-connected key-carrying sections, each said section having pivotal means for attaching a key thereto, each said section, further, being adapted to turn about its hinge connection whereby to render a key, carried thereby, accessible for use, the said attaching means comprising a substantially rigid rod pivotally connected to a key-carrying section and means for flexibly connecting a key to said rod, and the said rod being constrained to move about its pivot point, between extreme positions substantially 90° removed from each other, in a path having substantially confined lateral boundaries.

5. A holder for keys or the like, comprising a plurality of hingedly-connected key-carrying sections, each said section having pivotal means for attaching a key thereto, each said section, further, being adapted to turn about its hinge connection whereby to render a key, carried thereby, accessible for use, the said sections being substantially triangular in shape, and the key-attaching means being arranged to effect connection of a key in a corner of said section which is remote from the latter's said hinged connection.

6. A holder for keys or the like, comprising a plurality of hingedly-connected key-carrying sections, each said section having pivotal means for attaching a key thereto, each said section, further, being adapted to turn about its hinge connection whereby to render a key, carried thereby, accessible for use, the said sections having inwardly extending, peripheral flanges contributing to the formation of recesses for accommodating keys, said flanges being adapted to extend between keys within the holder when said sections are in closed position, whereby to contribute to the prevention of intermingling of such keys.

7. A holder for keys or the like, comprising a substantially rectangular open frame, a pair of complementally shaped key-carrying sections hingedly mounted on each side of said frame and adapted to substantially close the opposite open sides of the frame, spring means for separately holding said sections in open or closed positions, and pivotal means on each said section for attaching a key thereto.

8. A holder for keys or the like, according to claim 7, further characterized in having a partition attached to and extending between opposite sides of said frame whereby to prevent intermingling of keys in said opposite sides.

9. A holder for keys or the like, comprising a plurality of hingedly mounted key-carrying sections, each having means for attaching a key thereto, and a plurality of said sections being disposed in a common plane and constituting a side of said holder.

10. A holder for keys or the like, comprising one or more pairs of hingedly mounted key-carrying sections, each of which sections has means for attaching a key thereto, and the constituent sections of a pair being disposed in a common plane on one side of said holder.

11. A holder for keys or the like, comprising a pair of hingedly mounted key-carrying sections, each having means for attaching a key thereto, the said sections being disposed in a common plane on one side of said holder.

12. A holder for keys or the like, comprising a plurality of separately-openable, hingedly-connected key-carrying sections, each said section having pivotal means for attaching a key thereto, each said section, further, being adapted to turn about its hinge connection to an open position wherein a key, attached to said section, is made accessible for use, and the said attaching means being adapted to effect attachment of a key to each said section at a point substantially removed from its said hinged connection.

13. A holder for keys or the like, comprising a plurality of separately-openable, hingedly-connected sections, coacting to form an enclosure for keys, and plural, pivotally mounted key-attaching members, one of said members being provided with respect to each of said sections, and said sections, being adapted, when closed, to hold keys on their respective key-attaching members in non-usable positions, within such enclosure, such sections when open, however, affording no material restraint against movement of keys on their respective key-attaching members from non-usable to usable position.

14. A holder for keys or the like, comprising a substantially rigid mounting member, a plurality of separately-openable cover sections hingedly connected to said mounting member and adapted to form an enclosure, and separate pivotal means for connecting each of a plurality of keys within said enclosure, each of said cover sections being adapted, when closed, to restrain a key on a certain one of said separate connecting means against movement from a non-usable to a usable position, such sections, however, affording no such restraint when open.

15. A holder for keys or the like, comprising a plurality of separately-openable, hingedly-connected sections, each partially defining a separate key enclosure, and plural, pivotally mounted key-attaching members, one of said members being provided with respect to each of such enclosures, and said sections being adapted when closed, to hold keys on the key-attaching member related to such closed section in non-usable positions, such sections when open, however, affording no material restraint against movement of keys, on the key-attaching member related to such open section, from non-usable to usable position.

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