June 11, 1946. I. GELLER 2,401,753

KEY HOLDER

Filed Sept. 18, 1943

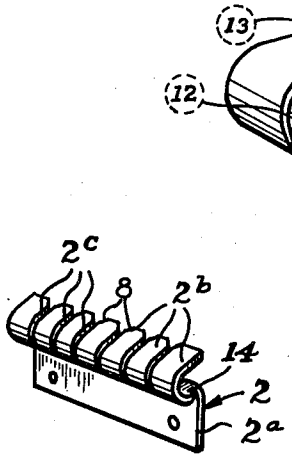


Fig. 1.

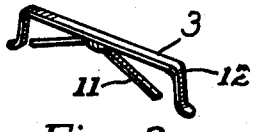


Fig. 2.

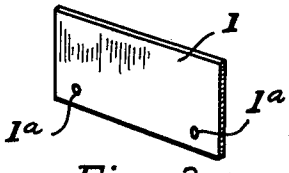


Fig. 3.

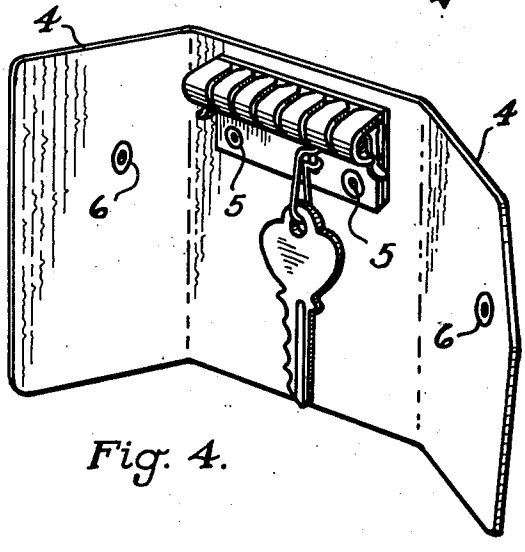


Fig. 4.

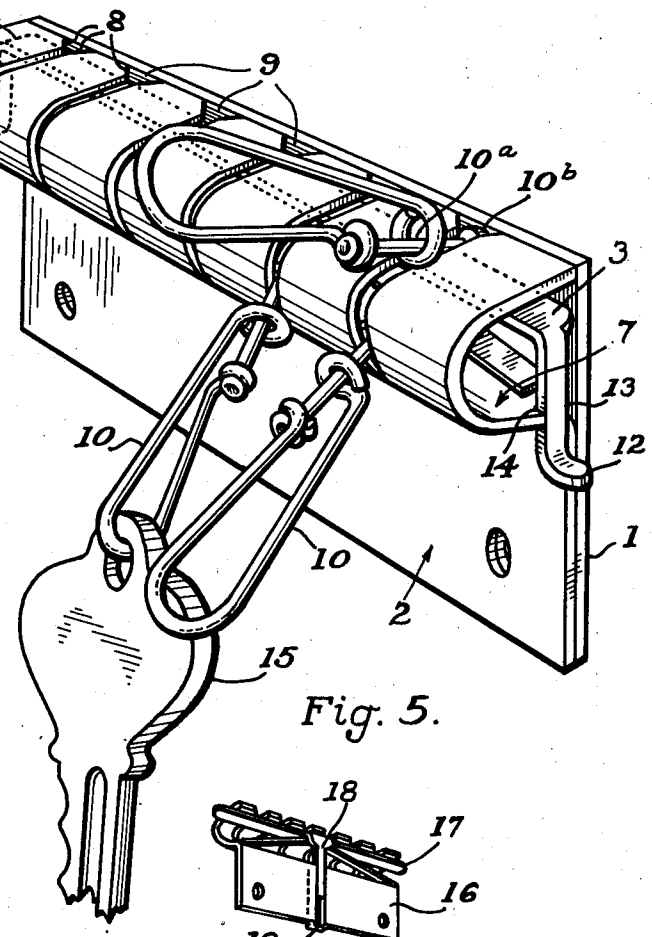


Fig. 5.

Fig. 6.

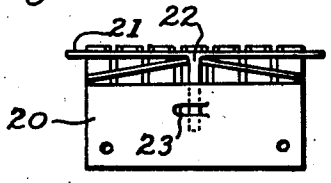


Fig. 7.

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Patented June 11, 1946 2,401,753

UNITED STATES PATENT OFFICE

2,401,753

KEY HOLDER

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Application September 18, 1943, Serial No. 502,957

3 Claims. (Cl. 70—456)

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My invention relates to a key holder and has for its specific object the provision of a relatively simple, yet efficient device for retaining a plurality of key holding devices in a spaced relationship, each of which, however, may be easily and quickly disengaged therefrom. My invention is directed to the same general subject matter as defined in U. S. Patent No. 2,145,477 entitled Key holder, issued to myself January 31, 1939; U. S. Patent No. 2,197,217, entitled Key support and holder therefor, issued to myself April 16, 1940, and U. S. Patent No. 2,197,218, entitled Key retaining and supporting member, issued to myself April 16, 1940.

My present invention defines a structure which may be constructed wholly of stamped or otherwise formed parts and which may be assembled very quickly. Although a keyholder to which my present invention is directed is adapted to be enveloped in a flexible cover, said cover plays no part therein. Said key holder thus comprises a flat base plate, a retainer adapted to be arranged in face-to-face relation therewith, and having a plurality of claw-like fingers arranged so that the tips thereof are in abutment with said base plate. The cupping of said fingers defines a closed chamber in which is housed a resilient latch, and knob-like ends of the shanks of key hangers may also be arranged within said chamber with said shanks extending through the spaces between fingers. The tips of said fingers are "snipped" off so as to increase the spacing laterally between the tips of the fingers. The latch underlies said enlarged space and when in place tends to prevent the knob-like ends of the shanks of the key hangers from passing therethru. When said latch is depressed, however, said knob-like end can pass therethru, to physically detach a key hanger from said holder.

Further and other details of my invention are hereinafter described with reference to the accompanying drawing, in which:

Fig. 1 is a perspective view of the body of the key holder showing the fingers arranged as retracted claws;

Fig. 2 is a perspective view of the releasable locking device;

Fig. 3 is a perspective view of the plane base plate;

Fig. 4 is a perspective view of a key case, having a key holder embodying my invention incorporated therewith, and showing a single key secured by a key hanger to said key holder;

Fig. 5 is a perspective view showing said key holder on substantially larger scale with portions of the releasable locking device shown in dotted outline to illustrate the arrangement thereof with respect to the tips of the fingers forming a part of said retainer;

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Fig. 6 is a perspective view illustrating a modification of my invention in which a single central guide is provided for the latching device instead of guides at each end as the parts are arranged in the first embodiment thereof; and

Fig. 7 is an elevation of a still further modification of my invention in which a single central guide is secured in an eye formed in the retainer rather than as arranged between the abutting faces of the retainer and the base plate, as in the first two embodiments.

A key holder embodying my invention comprises a base plate 1, a retainer 2, and a releasable elongated locking device 3. These three parts are adapted to be arranged in the manner illustrated in Fig. 5 and secured within a cover 4 by grommets or rivets 5. It is common to have a folded cover and the extended ends thereof releasably joined together by a snap fastening 6, the two halves thereof being arranged at the extremities of the cover, as is illustrated in Fig. 4.

The base plate is a mere flat piece of metal having apertures 1*a* formed therein, as is shown in Fig. 3. The retainer comprises a body portion 2*a* which is plane and adapted for face-to-face engagement with base plate 1. Fingers 2*b* are joined to said body and are spaced apart by slots 2*c*. Said retainer resembles a human hand with the body portion being the palm and the fingers being joined thereto and retracted, so as to form within said curved fingers a chamber 7, which is closed by base plate 1. The tips of said fingers are "snipped" off as at 8. The slots 2*c* are broader at points 9 and define releasing apertures. Extending through each of said slots is shank 10*a* of a key hanger 10. Said slots are of sufficient width to pass the shank 10*a*, but to retain the knob-like end 10*b* formed on the extremity of each of said shanks. That is, the said knob-link ends are adapted to be held within the chamber 7, but the key hangers are free to move through said slot. The locking device 3 is relatively flat and elongated and extends the full width of the retainer 2. It is adapted to lie flatwise across the broadened portion 9 of the slot 2*c*. Said broadened portions are adapted to pass the knob-like ends of the keyhanger. With the locking device in place, the shanks are not permitted to move into said broadened portions 9, and thus the key hangers are held between the said fingers. The lock-

ing device is resiliently supported by means of a spring member 11.

Lateral flanges 12 are formed at the extremities of the locking device 3 and the portions 13 lying immediately inwardly of said flanges are adapted to engage notches 14 formed adjacent bases of the two outermost fingers of the retainer. The engagement of said portions 13 with notches 14 tends to permit the latch to yield and to compress spring member 11 without moving the locking device out of alinement with the broadened ends of the slots 2c.

As the parts are arranged, either or both ends of the locking device may be depressed. If but one end is depressed, then the key hangers at said end alone may be removed and the key hangers at the other end of the key holder are held against inadvertent detachment. If, however, both ends of said locking devices are depressed, as would follow if the flanges 12 were pushed down simultaneously, then all of the key hangers could be removed if desired, because the locking device would be moved out of engagement with the underside of the fingers along its entire length. Each key hanger is adapted to hold one or more keys 15. The conformation of key hangers is unimportant as long as they are provided with shanks and enlarged heads.

In Fig. 6 I illustrate a modification of my invention. A key retainer 16 is adapted to function operatively with a locking device 17 arranged substantially in the same manner as heretofore described in connection with the embodiment illustrated and described. It differs, however, in that the locking device is provided with a central stem or guiding member 18 which is adapted slidingly to engage a groove 19 formed in the body of said retainer. When the retainer and locking device are arranged so that the retainer is in face-to-face abutment with a base, then the groove is closed and the guiding member is held to reciprocation in said groove. The elongated locking device is held in alinement with the tips of the fingers of said retainer as in the previous embodiment. The ends of said locking device extend beyond the lateral margins of the retainer, so that said protruding ends may be engaged to force the locking device out of engagement with the underside of said fingers to insert or remove a key hanger.

In Fig. 7 I illustrate a still further modification of my invention in which a retainer is provided with a locking device 21, also having a centrally arranged shank 22. A tongue 23 is formed from the face or body of the retainer 20 and is adapted to encircle this central shank and be formed thereabout slidably to engage the latter. In this modification, such retainer and said locking device are independent of the base plate and the locking device will be held in position independently of whether or not a base plate is secured to the retainer.

In each of these three embodiments of my invention the key holder comprises three main members, a base plate, a retainer and a locking device, for releasably holding a key hanger. The hanger normally is held within the spaces between the retracted fingers and cannot be removed unless the latch is depressed so that the knob-like end of the shank of a keyhanger can be moved into registration with the enlarged terminal portions of a slot. The base plate in each of these modifications is a mere flat fastening plate joined to the retainer key by a fastening means for securing all of said parts within a cover. I preferably utilize a key hanger, having a relatively flat head, which must be tipped sidewise as is shown in Fig. 5, to cause the head to pass through the enlarged terminal portion of the slot. This provides a double insurance against inadvertent disengagement of a key hanger from the key holder.

Although I have referred to the retainer and base plate as separate members removably secured together, I wish it to be understood that I recognize that said two pieces could be made of a single piece of material, bent about the marginal edge of the base. Said pieces will be integral but they will function in the same manner as separate members do.

I claim:

1. A key holder, comprising a base plate, a retainer, a releasable elongated locking device, and a plurality of key hangers, each having a shank with a head formed thereon, said key hangers being releasably engageable with said retainer, said key retainer defining cupped key retaining fingers, said fingers being spaced apart sufficiently to pass the shanks of said hangers but to retain the heads formed thereon, said fingers being spaced apart greater distances over spaced but limited areas to provide removing apertures for passing the heads of said key hangers, said locking device being U-shaped in elevation and extending longitudinally through the cupped portion of said retainer and downwardly along the sides thereof, elastic means for holding said locking device yieldingly over the head removing apertures in said retainer, and guides formed in the marginal edges of said retainer for receiving the laterally formed end portions of said locking device for preventing displacement thereof but accommodating reciprocating movement therein to permit said locking device to be moved away from said apertures accommodating disengagement of a key holder therethru.

2. A key holder, comprising a base plate, a retainer, a releasable elongated locking device, and a plurality of key hangers, each having a shank with a head formed thereon, said key hangers being releasably engageable with said retainer, said key retainer defining cupped key retaining fingers, said fingers being spaced apart sufficiently to pass the shanks of said hangers but to retain the heads formed thereon, said fingers being spaced apart greater distances over spaced but limited areas to provide removing apertures for passing the heads of said key hangers, said locking device having a laterally projecting end portion and extending longitudinally through the cupped portion of said retainer and downwardly along the sides thereof, elastic means for holding said locking device yieldingly over the head removing apertures in said retainer, and a guide formed in one marginal edge of said retainer for receiving the laterally formed end portion of said locking device for preventing displacement thereof but accommodating reciprocating movement therein to permit said locking device to be moved away from said apertures accommodating disengagement of a key holder therethru.

3. A key holder, comprising a base plate, a retainer, a releasable elongated locking device, and a plurality of key hangers, each having a shank with a head formed thereon, said key hangers being releasably engageable with said retainer, said key retainer defining cupped key retaining fingers, said fingers being spaced apart sufficiently to pass the shanks of said hangers but to retain the heads formed thereon, said fingers being

spaced apart greater distances over spaced but limited areas to provide removing apertures for passing the heads of said key hangers, said locking device being U-shaped in elevation and extending longitudinally thru the cupped portion of said retainer and downwardly along the sides thereof, elastic means for holding said locking device yieldingly over the head removing apertures in said retainer, and guides formed in the marginal edges of said retainer for receiving the

laterally formed end portions of said locking devices for preventing displacement thereof but accommodating reciprocating movement therein to permit said locking device to be moved away from said apertures accommodating disengagement of a key holder therethru, said elastic means centrally engaging said locking device to permit either end to be moved to disengaging position without disturbing the other end.

ISAAC GELLER.