Nov. 10, 1942. M. BROCINER 2,301,611

KEY HOLDER

Filed July 30, 1941

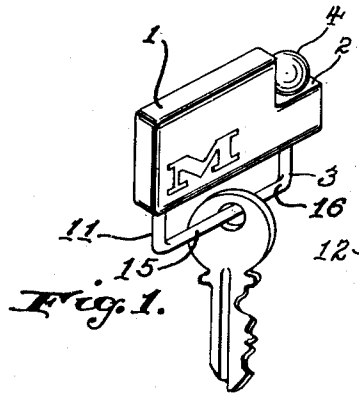


Fig. 1.

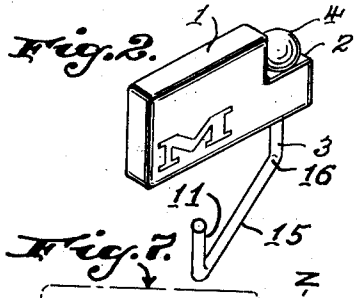


Fig. 2.

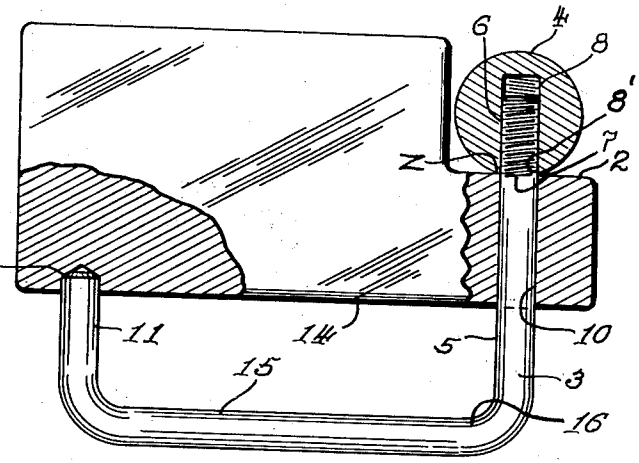


Fig. 3.

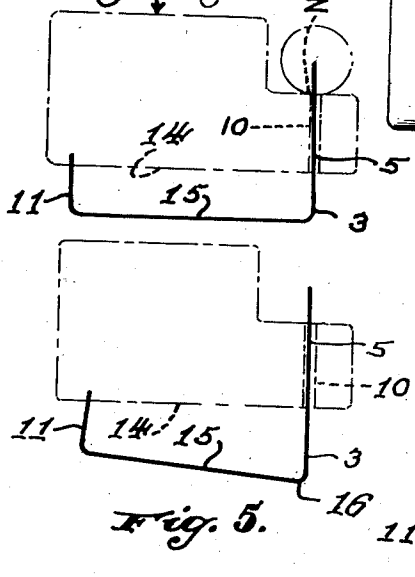


Fig. 7.

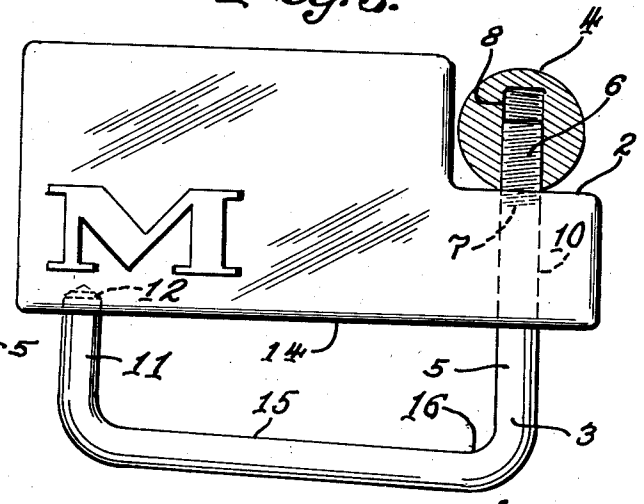


Fig. 4.

Fig. 5.

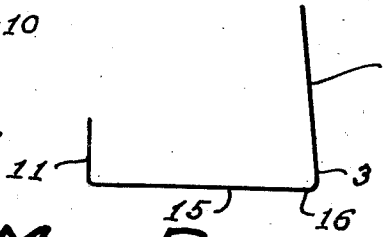


Fig. 6.

Inventor

MAX BROCINER

Witness

By Edwin T. Samuels

Attorney

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2,301,611

KEY HOLDER

Max Brociner, Baltimore, Md.

Application July 30, 1941, Serial No. 404,595

3 Claims. (Cl. 70—456)

The invention relates to a key holder or carrier which may be referred to as of the padlock type in that it consists of a block or body member and loop closely resembling the hasp of a padlock.

A feature of the invention in its preferred form is the construction of the hasp or loop of spring wire or similar material and in a form and arrangement, in connection with the block whereby the hasp or loop is deflected from its normal shape by tightening a nut or equivalent fastening means thus deflecting the hasp and placing it under tension, which by pressing the nut against a surface of the block or otherwise provides a locking stress which is of considerable advantage in the use of the key holder. Such holders are ordinarily carried in the pocket or handbag and the tendency of the nut to become unscrewed releasing and scattering the keys is easily recognized. This tendency is thus overcome without additional parts or complication of the construction. The improved construction which is capable of considerable variation as by change of the shape of the loop and use of other fastening means instead of a nut is, in fact, of extreme simplicity consisting, in the preferred form, of but three parts, the block, the loop or hasp and the nut or equivalent fastening.

In the form shown, the hasp is U-shaped and has a leg on which the nut is threaded and which first passes through a hole in the block. This leg may be normally inclined away from what might be considered its natural, right angular, position and tightening of the nut tends to deflect and thus to straighten it and to change the angle to a right angle, thus placing the hasp under tension and locking the nut as by tending to rock it against the block. It is notable, however, that the deflection of the hasp whereby it is placed under tension to perform the locking function may be accomplished in various ways as by inclining either the leg of the loop or the hole and in either case deflecting the loop or hasp by tightening the nut and causing it to conform to the hole pressing the nut against the block. The locking effect may be increased by stopping the thread on the hasp where the nut contacts the block or where the thread of the nut terminates in the final locked position of the nut.

In the preferred construction of the invention hereinafter illustrated the hasp is of U-shape, one end of the U which is short, resting, in the closed position of the hasp, in a shallow socket in the block or body member, the other end or leg of the U being passed through a hole near the opposite end of the block and secured by means of a nut shown in the form of a ball.

In the accompanying drawing I have illustrated a key holder embodying the features of the invention in the preferred form, other forms being contemplated.

In the drawing,

Fig. 1 is a perspective view showing the key holder with a key thereon, approximately full size.

Fig. 2 is a similar view showing the hasp opened and the key removed.

Fig. 3 is an elevation on an enlarged scale showing the key holder with the hasp closed and locked, portions being sectioned for convenience of illustration.

Fig. 4 is a similar elevation with the nut removed and the hasp relaxed substantially to its normal position.

Figs. 5, 6 and 7 are diagrammatic views for convenience in describing the theory of operation.

Referring to the drawing by numerals, each of which is used to indicate the same or similar parts in the different figures, the construction comprises a block or body 1, which may to advantage be formed with a shoulder or offset 2 providing a pocket for the nut. This block cooperates with a hasp or wire loop 3 which is shown as of U shaped outline and a nut 4 engages one leg of the U, the nut being preferably spherical or of suitable ornamental appearance and seated on said shoulder.

The loop or hasp 3 may be secured in various ways but it is preferably of spring wire or equivalent material and so arranged that it may be deflected to give spring tension and hence a locking effect as the nut or other suitable fastening 4 is tightened.

According to the preferred form illustrated, this hasp or loop 3 has one leg 5 elongated, the other leg 11 being preferably short. Leg 5 is threaded at 6 to receive the nut 4.

To assist in locking, the thread 6 may terminate at 7 at the location of the forward end 8' of the nut thread 8 in the position in which tension locking as hereinafter described takes place.

In the form shown, offset 2 is bored or otherwise provided with a hole at 10 so that the long leg 5 of the hasp 3 can be passed therethrough, the end of the latter as aforesaid being threaded at 6 to receive the nut 4. The other end or leg of the U at 11 is shown as shorter and adapted to be seated in a shallow socket 12 in the block.

As already suggested the long leg 5 of the U shaped hasp may be inclined inwardly from the right angular position and the hole can be substantially at right angles to the bottom surface 14 of the block, said hole being slightly larger than the wire composing the hasp 3, so that there is a tendency for the hasp to remain in the position as shown in Fig. 5. As the nut is tightened there is a controlling tendency to draw the cross arm 15 of the U toward the surface 14 of the block as to the end 16 thereof, making said cross arm parallel to said surface 14. At the same time, the inclined leg 5 of the hasp is swung or bent clockwise to the position shown in Fig. 7. This gives a tendency, as the nut is tightened, to press a surface of the nut against the shoulder 2 as at Z affording a locking action as the hasp is drawn to the position shown in Figs. 1 and 3.

If the thread 6 on the leg 5 of the hasp is terminated as suggested at 7 so that the nut 4, more particularly the end of the thread 8 therein reaches the end 7 of the thread on the hasp leg when the nut reaches its final position, this arrangement gives a clamping action which assists in locking.

It may be noted that the seating of the end of the short leg of the U in the socket 12 provides a fulcrum about which the hasp may swing and deflect from the position, Fig. 5, to the position in Fig. 7, as the nut is tightened, with a consequent tendency of the leg 5 to press against the top edge of the hole 10 and press the nut against the block at Z. In this position the tension of the nut tends to straighten the leg 5 or bring it to a right angular position maintaining a continuous locking tension till the nut is loosened. To release the hasp the nut 4 is unscrewed and pushed downwardly see Fig. 2, removing the short leg 11 from socket 2.

The objects and accomplishment of the invention are fully discussed in the preamble.

I have thus described a single embodiment of my invention in the preferred form, the description being specific and in detail in order that the manner of constructing, operating and using the invention may be fully understood. However, the specific terms herein are used descriptively rather than in a limiting sense, the scope of the invention being defined in the claims.

What I claim as new and desire to secure by Letters Patent is:

1. In a key holder comprising a block having a hole therethrough and a seat spaced away from said hole and a U shaped hasp one leg of the U being elongated and extending through said hole, the other end engaging said seat, forming with the block in the closed position of the hasp, a loop to hold the keys, a nut threaded on the long leg and engaging the block for deflecting and applying tension to the hasp in the closed position of the latter to lock the nut and the hasp in said position the thread on the hasp terminating at the forward end of the nut thread in the closed position of the hasp to assist in locking said nut.

2. In a key holder comprising a block and a hasp, the latter forming with the block in the closed position of the hasp, a loop on one side of the block to hold the keys, the hasp being of U shaped form with one leg elongated, the block having a hole through which said elongated leg of the hasp is passed, the block having a seat for the end of the short leg of the hasp, spaced away from said hole and the long leg of the hasp being normally inclined to said hole, a nut threaded on an end of the hasp which projects from the hole in the block oppositely to the loop, the nut serving to deflect said long leg of the hasp and apply tension to the hasp providing a locking stress pressing the nut against the block at one side of said leg and said hole.

3. In a key holder comprising a block and a hasp forming with the block in the closed position of the hasp a closed loop to hold the keys said hasp being of U-shape, having two legs, one longer than the other, the block having a socket for the short leg and a hole through which the long leg is passed, the hole being out of alignment with the normal position of the long leg and a nut engaging the long leg for applying tension and tending to align the said leg with the hole.

MAX BROCINER.