

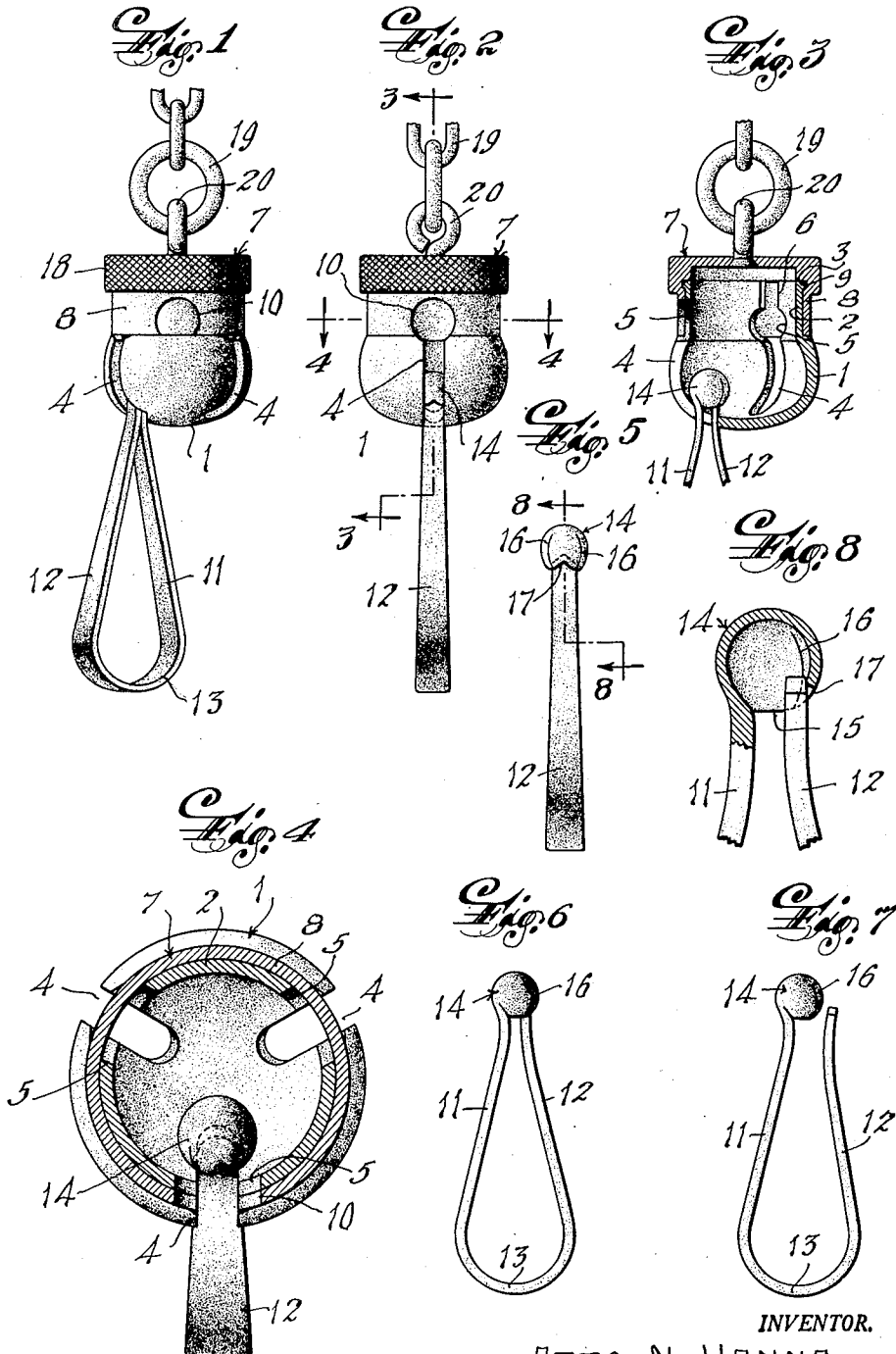
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KEY HOLDER

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KEY HOLDER

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This invention relates to key holders.

A prime object of the present invention is to provide a key holder having means for locking a plurality of key retaining elements or loops, the construction being such that the key retaining elements may be readily mounted on the holder, said elements being individually releasable together with the keys carried thereby.

Another object is to provide a key holder having a plurality of key retaining elements or loops mounted thereon with manual means for releasably locking all of the elements thereon.

A further object is to provide a key holder wherein the key retaining element can easily and quickly be attached or detached.

Still another object is to provide a key holder with means for positively locking the key retaining element in position and thus preventing accidental disengagement thereof.

A specific object is to provide a key retaining member with means for permitting ready assembly and disassembly of a key.

Yet another object is to provide a key holder that can be fastened to an article of clothing worn by the user and is adapted for ready use.

A still further object is to provide a key holder that is simple and compact in structure, inexpensive to manufacture, highly efficient in use and attractive in appearance.

Other objects and advantages of the invention will be apparent from the description thereof to follow taken in conjunction with the accompanying drawing in which—

Figure 1 is a side view of my improved key holder showing the parts in position for locking the key retaining element thereon.

Figure 2 is a similar view showing the parts in position for releasing the key retaining element from the holder.

Figure 3 is a vertical sectional view taken on the plane of the line 3—3 of Figure 2.

Figure 4 is an enlarged cross-sectional view taken on the plane of the line 4—4 of Figure 2.

Figure 5 is a front elevational view of the key retaining element in closed position.

Figure 6 is a side elevational view thereof.

Figure 7 is a side elevational view of the key retaining element in open position.

Figure 8 is an enlarged vertical sectional view taken on the plane of the line 8—8 of Figure 5.

Referring to the drawing, the improved key holder comprises a hollow body having a lower cup-shaped portion 1 and an upper cylindrical neck portion 2 open at the top. The body is preferably formed of sheet metal but may be

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formed of any suitable material. The upper edge of the neck portion is formed with a laterally extending peripheral flange 3. The body is formed with a plurality of spaced arcuate-shaped slots 4 in the lower cup-shaped portion, each slot extending from a point at the bottom of said portion to the top thereof where it terminates in a substantially circular opening 5 formed in the upper neck portion 2 which opening is wider in diameter than the width of the slot 4. Another straight slot 6 extends upwardly from the circular opening 5 to the edge of the neck portion and is the same width as the slot 4. Three of such slots 4 are illustrated but it will be understood that a single slot or any number desired may be used.

A cap member 7 of similar material closes the upper open end of the body and has a depending skirt portion 8 sprung over the neck portion 2, the slotted neck permitting this. Immediately above the skirt portion the cap member is formed with an annular groove 9 on its inner surface for slidably receiving the flange 3 of the body. The cap member is thus rotatably mounted on the body. The skirt portion 8 is formed with a single substantially circular opening 10 which extends downwardly and intersects or opens through the lower edge of the skirt portion as shown in Figures 1 and 2 to form a notch. The opening 10 is the same size as the opening 5 in the neck portion 2. Upon rotating the cap member, the notch 10 is adapted to be brought into register with one of the circular openings 5 and with the corresponding slot in the neck portion as will be understood.

The key retaining or supporting element or loop member used with the key holder is formed of a single piece of bar metal and comprises a pair of integral upwardly extending convergent arms 11 and 12 connected at their lower ends by a curved key supporting portion 13. The edges of the arms taper upwardly and inwardly with their narrowest portion at the upper ends, which ends are inclined slightly away from each other. On the upper end of arm 11 is an integral hollow spherical or ball-like member 14, the mass of material thereof being positioned to one side of the arm 11 toward the arm 12 and being opened at the bottom as indicated at 15. Its front wall is provided with spaced slits 16 which extend downwardly to and through its bottom edge wall, which edge wall at a point between said slits is provided with a V-shaped notch 17. The upper end of arm 12 extends slightly above the lower edge wall of the ball member 14. The ball mem-

ber is smaller in diameter than the diameter of the openings 5 and 10 but larger than the slot 4, and the upper narrow ends of the arms are smaller in width than the width of the slot 4.

In using the improved key holder, assuming that the key retaining element is open as shown in Figure 7, a key or keys are slipped over the free upper end of the arm 12 and passed downwardly therealong to the curved supporting portion 13. The arms are then pressed or squeezed together by the fingers which action will force the upper end of arm 12 to engage the notched section of the bottom edge wall of the ball member between the slits 16 and thus flex said section permitting the upper end of the arm to snap across said bottom edge wall to the inside of the ball member. Upon release of pressure the upper end of the arm 12 will automatically snap away from arm 11 and interlock with said bottom edge wall on the inside of the ball member as shown in Figure 8 thereby locking the key or keys on the supporting portion 13. If the opening 10 in the cap member is not in register with one of the openings 5 in the neck portion, the cap member is grasped by the fingers at its knurled periphery 18 and rotated until said opening 10 registers with one of said circular openings 5. The ball member is next inserted through the registering openings and then slid downwardly through the adjacent slot 4 until it seats on the bottom wall thereof as shown in Figure 3. The cap member is then rotated moving its opening 10 away from the opening 5 in the neck portion whereby said opening 5 becomes covered by the skirt portion of the cap member and the upper end of the adjacent slot 4 becomes closed as shown in Figure 1. Inasmuch as the diameter of the ball member 14 is larger than the width of the slot 4 it cannot be withdrawn and the key retaining element is thus locked in position by the skirt portion of the cap member.

When it is desired to release the key retaining element, the cap member is again rotated until its opening 10 registers again with the opening 5 at the top of the slot 4 which holds the key retaining element. The key retaining element may then be slid upwardly to the top of said slot and the ball member 14 pulled outwardly to release it from the key holder.

To release a key or keys from the key retaining element, the arm 12 is pressed inwardly and downwardly until it rides clear of the bottom edge wall of the ball member 14 whereupon pressure is released and the arm springs outwardly away from the ball member as shown in Figure 7 permitting the key or keys to be slipped up over the free upper end thereof.

The key holder may be suspended from one end of a chain 19 or other suitable flexible member by means of an eyelet 20 secured to and extending above the center of the upper surface of the cap member. The other end of the chain may have a fastening member (not shown) for releasably fastening the chain to a suitable portion of the clothes of the user of the key holder

so that the key holder will be ready for instant use.

It will be seen that the improved key holder is simple and compact in structure permitting the user to grasp the key retaining element with his fingers for ready use. The key retaining element can easily be attached and detached from the body and the element is positively locked in position by means of the cap member. It cannot be accidentally released as it requires a rotational movement of the cap member and a vertical upward movement of the key retaining element before said key retaining element can fall out.

Changes in details may be made without departing from the scope or principle of the invention.

What I claim is:

1. A holder for key supporting elements each including an arm having a ball at one end thereof, said holder comprising a hollow body having a cup-shaped portion and an integral cylindrical neck portion provided with an open end, said cup-shaped portion having slots formed therein of a width to receive said arm of said key supporting element, said neck portion having an opening communicating with each said slot of a diameter greater than said ball on said key supporting element, and a cap member having a depending skirt rotatably mounted on said neck portion, said skirt having a notch as large as said opening in said neck portion and adapted to be moved into and out of register with any opening and the corresponding slot in said neck portion upon rotation of said cap member to permit insertion and prevent removal of said key supporting element into and from said slot, respectively.

2. A holder for key supporting elements each including an arm having a ball thereon, said holder comprising a hollow body having an opening surrounded by a circular rim having a slot in its walls of a width to receive said arm of a key supporting element and also having an enlarged opening communicating with said slot and of a diameter greater than said ball on said key supporting element, and a cap member rotatable on said rim and having a notch in its edge as large as and adapted to be moved into and out of register with said enlarged opening upon rotation of said cap member, to permit insertion and prevent removal of said key supporting element into and from said enlarged opening, respectively.

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