Feb. 19, 1924. 1,484,532

J. B. QUIGLEY

KEY RING

Filed March 6, 1923

Fig. 1.

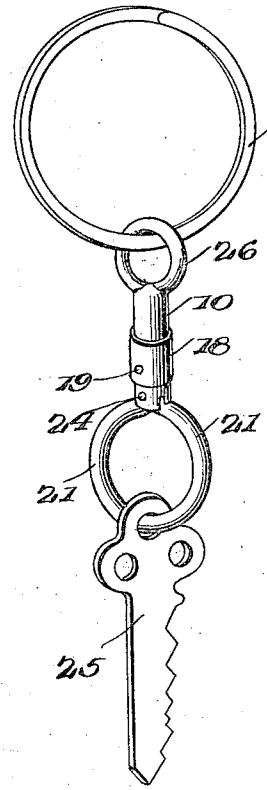


Fig. 2.

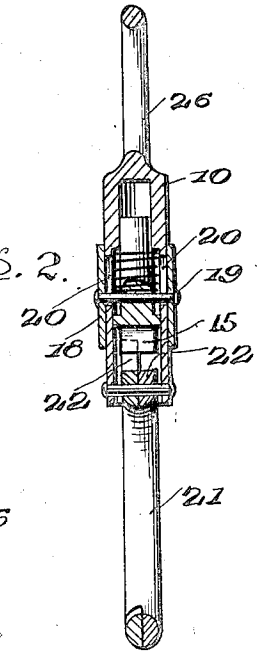
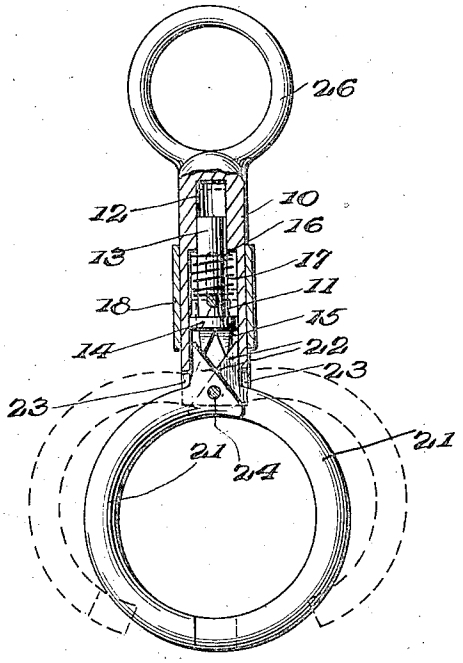


Fig. 3.



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Patented Feb. 19, 1924. 1,484,532

UNITED STATES PATENT OFFICE.

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KEY RING.

Application filed March 6, 1923. Serial No. 623,216.

To all whom it may concern:

Be it known that I, JAMES B. QUIGLEY, a citizen of the United States, and a resident of Independence, in the county of Jackson, State of Missouri, have invented certain new and useful Improvements in Key Rings, of which the following is a specification.

This invention relates to improvements in key rings.

The object of the invention is to provide a key ring which is exceedingly easy to manipulate for locking a key thereon or releasing the same.

It is also within the scope of the objects of the invention that the device be exceedingly simple in construction and inexpensive to manufacture.

Other objects relating to details of construction will hereinafter appear in the detailed description to follow.

The invention is illustrated by way of example in the accompanying drawings, in which:

Figure 1 is a perspective view of the device and showing the same attached to a conventional form of split ring and also showing a key locked thereon,

Figure 2 is a longitudinal sectional view of the device, and

Figure 3 is a view in side elevation of the device, the body portion thereof shown in longitudinal section in order to clearly illustrate the working mechanism of the device.

Referring to the drawings more particularly, 10 indicates generally a stem which is provided with an enlarged bore 11 terminating at its upper end in a reduced bore 12. Within the bore 12 there is slidably fitted a pin 13, said pin terminating at its lower end in a circular head 14 which is formed with a V-shaped lug 15, said lug being in axial alignment with the pin. The reduced bore 11 provides a shoulder at its open end, as indicated at 16, and interposed between this shoulder and the head 14 of the pin 13 is a coil spring 17, said coil spring as is apparent being adapted to urge the pin 13 downwardly with respect to the stem 10.

Slidable upon the stem 10 is a sleeve 18 and said sleeve carries a pin 19 which is disposed in longitudinally extending slots 20 formed in the stem 10 and also extends through a suitable opening in the pin 13 as best shown in Figure 2 of the drawings. As is obvious the sleeve 18 when moved upwardly upon the stem 10 will carry therewith the pin 13 against resistance of the spring 17.

At 21 there is indicated a pair of semi-circular jaws, each jaw terminating at its one end in a laterally disposed lug 22 and each lug being pointed, as shown. The end of each jaw 21 which terminates in the lug 22 is flat and in the lower end of the stem 10 there is provided a pair of diametrically oposed recesses 23. The lug portions 22 of the jaws 21 are fitted upon each other and inserted in the lower end of the stem 10, and pivotally connected to the stem by means of a transversely extending pin or rivet 24. The recesses 23 permit the jaws to be swung upwardly or outwardly in the dotted line position shown in Fig. 3, and thereby to permit one or more keys to be placed upon the same. The free end of each jaw is provided with an offset, so that the jaws may overlap each other when brought to the closed position as illustrated in Figures 2 and 3. The jaws may be of any desired cross section, however, preferably circular as shown, and either jaw is adapted to be extended through the usual opening provided in the handle portion of a key. A key of this kind is shown in Figure 1 and indicated by the reference numeral 25.

The stem 10 may also be formed at its one end with a ring 26 and through this ring there may be threaded a split ring 27 of the usual construction, whereby the key-holding device may be secured to a chain.

In the use of the present device, assuming a key is placed upon one of the jaws 21 and that the jaws are closed, as shown in Fig. 1, the pin 13 will be in the position shown in Fig. 3 and the V-shaped lug 15 will engage between the pointed lugs 22 of the jaws 21 and thus lock the jaws against movement with respect to each other. The lugs 22 of the jaws 21 should register with each other when said jaws are closed upon each other. The spring 17 will at all times retain the pin 13 in this last named position.

If it is desired to remove the key from the jaws 21 then the sleeve 18 may be grasped and moved toward the ring 26 upon the stem 10, whereby the pin 13 will be moved so that its lug 15 will release the lugs 22 and thus permit the jaws 21 to open and in this way permit a key to be removed from said

jaws. As is obvious the locking mechanism for the jaws 21 may be operated in an instant either to release or lock said jaws.

It may be here mentioned that this particular device is valuable to the driver of an automobile in case that the automobile should have a steering wheel lock where two keys must be employed simultaneously for unlocking the same. In such a case, the keys must be separated from each other, that is, both keys could not be used upon the same ring, and by having a key ring which may be quickly operated for releasing a key it would be of an advantage, as is apparent.

I claim:

1. In a device of the character described comprising a stem, a pair of jaws each having its one end pivotally connected to the similar end of the stem and the pivoted end of each jaw being formed with a projection, and means movable in the stem whereby to engage between the projections and lock said jaws in their closed position.

2. A device of the character described comprising a stem, a pair of jaws each having its one end pivotally connected to a similar end of said stem and the pivoted end of each jaw having formed thereon an outwardly extending projection, said projections being divergent with relation to each other when the jaws are closed, and movable means carried by the stem adapted to be brought to engage between the projections and thereby lock the jaws against movement.

3. In a device of the character described comprising a hollow stem, a pair of jaws each having its one end pivotally connected to a similar end of said stem, a pin movable within the stem, and means whereby said pin may be operated for locking the jaws in their closed position and also to release said jaws and permit free outward swinging movement thereof.

4. A device of the character described comprising a hollow stem, a pair of jaws each having its one end connected to a similar end of said stem, a spring pressed pin within the stem, and adapted to normally engage said jaws when in their closed position and locking the same against outward swinging movement, and means operable whereby said pin may be moved for releasing said jaws.

5. A device of the character described comprising a hollow stem, a pair of jaws each having its one end connected to a similar end of said stem, a spring pressed pin within the stem and adapted to normally engage said jaws when in their closed position for locking the same against outward swinging movement, a sleeve movable longitudinally of said stem, and connecting means between said sleeve and pin, whereby the pin may be moved for releasing said jaws.

6. A device of the character described comprising a hollow stem, a pair of jaws each having its one end pivotally connected to a similar end of said stem, a projection at the pivoted end of each jaw and extending into said stem, a spring pressed pin within the stem, co-operative means whereby the pin may engage the projections of said jaws, when said jaws are in closed position and lock said jaws against outward swinging movement, and means whereby said pin may be moved for releasing said jaws.

7. A device of the character described comprising a hollow stem, a pair of jaws each having its one end pivotally connected to a similar end of said pin, a pin movable longitudinally within said stem, spring means for pressing said pin toward the jaws, a lug carried upon the pivoted end of each jaw and said lugs adapted to diverge with respect to each other when the jaws are in their closed positions, means carried by the spring pressed pin to engage between the lugs when in the last named position and thereby lock the jaws against outward swinging movement, and means whereby said pin may be moved against the tension of its spring and thereby to release said jaws.

8. A device of the character described, comprising a hollow stem, a pair of jaws each having its one end pivotally connected to a similar end of said stem, a pin movable longitudinally within said stem, spring means for pressing said pin toward the jaws, a lug carried upon the pivoted end of each jaw and said lugs adapted to diverge with respect to each other when the jaws are in their closed position, a lug carried upon the end of the pin associated with said jaws and adapted to engage between the lugs carried by the jaws when in the last named position, thereby to lock the jaws against outward swinging movement, and means whereby the pin may be moved against the resistance of its spring for releasing said jaws.

JAMES B. QUIGLEY.