W. HORNICH, JR.

KEY RING.

APPLICATION FILED DEC. 21, 1912.

1,094,568. Patented Apr. 28, 1914.

Fig. 1.

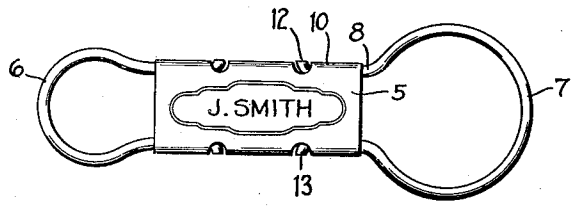


Fig. 2.

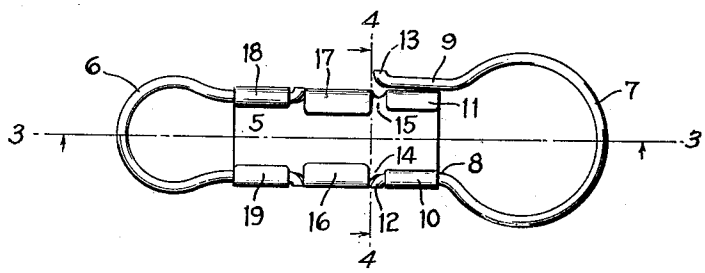


Fig. 3.

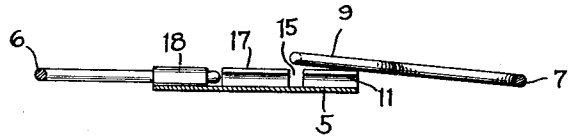
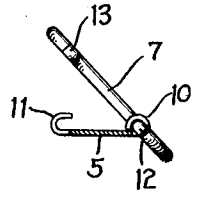


Fig. 4.



Witnesses:
C. W. Carroll
D. Gurnee

Inventor:
William Hornich Jr
by his attorneys
Osgood, Davis & Dorsey

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE

WILLIAM HORNICH, JR., OF ROCHESTER, NEW YORK, ASSIGNOR TO BASTIAN BROTHERS COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

KEY-RING.

1,094,568. Specification of Letters Patent. **Patented Apr. 28, 1914.**

Application filed December 21, 1912. Serial No. 738,035.

To all whom it may concern:

Be it known that I, WILLIAM HORNICH, Jr., a citizen of the United States, and resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Key-Rings, of which the following is a specification.

This invention relates to key-rings or analogous devices for holding a number of keys or other articles.

The object of the invention is to produce a key-ring of simple construction, which may be easily unlocked to permit keys or other articles to be placed thereon or removed therefrom, and which shall hold such articles securely when in closed position.

More particularly, the invention is designed to produce a key-ring which may be constructed easily and cheaply of sheet-metal and wire, and which shall afford a surface for displaying the name of the owner, or advertising or ornamental matter of any desired kind.

To the foregoing ends the invention consists in the key-ring hereinafter described, as it is defined in the appended claims.

In the accompanying drawings: Figure 1 is a plan-view of a key-ring embodying the present invention, shown with its face uppermost and with the ring in closed position; Fig. 2 is a plan-view of the key-ring in inverted position, with one end open for the reception of keys; Fig. 3 is a sectional view on the line 3—3 in Fig. 2; and Fig. 4 is a sectional view on the line 4—4 in Fig. 2, showing the key-ring in more widely-opened position.

The invention is illustrated as embodied in a key-ring of double form, that is, as shown it comprises two portions adapted either to receive, respectively, a set of keys at one end, and a key-chain at the other end, or to receive keys at both ends and thus divide the keys into two groups. It will be understood, however, that the invention is equally applicable to a key-ring of single form.

The illustrated device comprises a body-portion 5 formed of sheet-metal, and of rectangular, flat form except for its upper and lower marginal portions, which are bent rearwardly as hereinafter described. Coöperating with the body 5 are two loop-members 6 and 7, made of resilient wire bent to the form of open loops. These loop-members are similar in construction and operation, except that they are shown of different diameters, the smaller loop-member 6 being adapted to receive either the end of a key-chain, or one or more keys which it is desired to segregate from the other keys carried upon the larger loop-member 7.

Both loop-members are similarly connected with the body 5. As shown particularly in Fig. 2, the loop-member 7 has two straight end-portions 8 and 9, which engage the body. Each longitudinal margin of the body is bent rearwardly and inwardly, and is cut or notched at two points, thus forming three sections, of which the right-hand section 10 of one margin is curved around the end-portion 8, so as to form a sleeve which confines this portion of the loop-member loosely and permits the loop-member to be swung or rotated in the sleeve. The other end-portion 9 of the loop-member normally engages the right-hand portion 11 of the other longitudinal margin of the body, this part 11 being bent inwardly so as to form a hook-shaped abutment. This abutment provides a recess opening toward the sleeve 10, and in this recess the end-portion 9 normally rests, being retained therein resiliently by the spring-action of the wire. In the normal closed position of the key-ring, therefore, the loop-member lies substantially in the plane of the body 5. The extremities of the end-portions 8 and 9 of the loop-member are bent transversely, to provide outwardly-projecting parts 12 and 13. These parts engage the left-hand ends of the members 10 and 11, and prevent the loop-member from being withdrawn longitudinally from the body, so that the key-ring is adapted to remain securely in closed position when subjected to considerable longitudinal strains. The extremity 12 also serves, by engagement with the flat portion of the body, to limit rotation of the loop-member in the sleeve 10.

When it is desired to open the key-ring, pressure is applied to the opposite arms of

the loop-member 7, so as to bend it in its plane and force the ends toward each other. In this manner the end 9 is disengaged from the hook 11, whereupon the loop-member may be swung out of its plane by rotation of the end 8 in the sleeve 10, thus disengaging the end 9 from the body, as shown in Fig. 4. Keys or other articles may then be passed over the end 9, and the ring may then be closed again by operations the converse of those just described.

The central portions 16 and 17 of the bent margins on the body constitute lugs adapted to prevent end-wise movement of the loop-member, toward the body, by engagement with the lateral projections 12 and 13, as shown in Figs. 1 and 2.

The loop-member 6 is arranged to operate in the same manner as the member 7, except that in this case the sleeve in which it rotates is formed in the left-hand portion 18 of the body, while the hook is formed by the part 19.

The wide, flat body 5 affords a surface adapted to receive ornamental matter, or inscriptions of any desired character, such, for example, as advertising matter, or the name of the owner of the key-ring.

The construction just described produces a key-ring which may be very conveniently operated, and which is adapted to hold keys with great security. It also produces a key-ring of simple and inexpensive construction, embodying, in its simplest form, only two pieces of metal, namely, the sheet-metal body and the spring-wire loop-member.

My invention is not limited to the embodiment thereof hereinbefore described and illustrated in the accompanying drawings, but may be embodied in various other forms within the nature of the invention as it is defined in the following claims.

I claim:—

1. A key-ring having, in combination, a body provided with a pivotal bearing and a recess; and a member formed of wire in the shape of an open loop; one end of the loop-member being pivotally mounted and fixed against longitudinal movement in said bearing, and the other end being normally seated in the recess and retained yieldingly therein by the resiliency of the wire.

2. A key-ring having, in combination, a body provided with a sleeve and a recess; and a member formed of wire in the shape of an open loop with a straight end-portion; said end-portion of the loop-member being rotatably mounted and fixed against longitudinal movement in the sleeve, and the other end of the loop-member being normally seated in the recess and retained yieldingly therein by the resiliency of the wire.

3. A key-ring having, in combination, a body of sheet-material having one margin rolled over to form a sleeve and the opposite margin turned back to form an abutment having a recess opening toward the sleeve; and a member formed of wire bent in the shape of an open loop; one end of the loop-member being rotatably mounted and fixed against longitudinal movement in the sleeve, and the other end being normally seated in the recess and retained therein by the resiliency of the wire.

4. A key-ring having, in combination, a body provided with a sleeve; a member formed of wire bent to the shape of an open loop, and having one end embraced by the sleeve, with a laterally-bent extremity adapted to engage the body, beyond the sleeve, to limit the rotation of said end in the sleeve; and the other end of the loop-member being normally retained resiliently against the body, but disengageable therefrom by swinging the loop-member about the end embraced by said sleeve.

5. A key-ring having, in combination, a body comprising a piece of sheet-material of which the main-portion is flat, while the opposite margins are bent back to form, respectively, a sleeve and a hook; and a member formed of resilient wire in the shape of an open loop; the loop-member having straight end-portions normally seated in the sleeve and the hook, respectively, and laterally-bent extremities beyond said straight portions; the body having also marginal lugs adapted to engage said extremities to limit lengthwise movement of the loop-member, and the loop-member being rotatable in said sleeve, and being disengageable from said hook by bending the loop-member in its plane.

6. A key-ring having, in combination, a body of sheet-material having substantially-parallel, opposite marginal portions bent backwardly, and notched at a distance from one end of the body; and a member formed of resilient wire in the shape of an open loop, and having straight end-portions normally engaging the inner surfaces of said marginal portions of the body, and outwardly-bent extremities normally engaging the notches therein; one of said marginal portions, adjacent the end of the body, being further bent inwardly to form a sleeve loosely embracing one of said end-portions of the loop-member, and the corresponding part of the other marginal portion of the body being in the form of an inwardly-opening hook, in which the other end of the loop-member is retained resiliently and from which it may be disengaged by bending the loop-member in its plane.

7. A key-ring having, in combination, a body provided with a sleeve and with an abutment having a recess opening toward the sleeve; and a member formed of resili-

ent wire bent in the shape of an open loop; one end of the loop-member being rotatably mounted in the sleeve, the other end being normally seated in the recess and retained resiliently therein, and both ends having laterally-bent extremities adapted, by engagement with the sleeve and the abutment, to prevent longitudinal movement of the ends therein.

WILLIAM HORNICH, JR.

Witnesses:
D. GURNEE,
L. THON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."