W. L. DENIO & W. E. NEER.

Key-Ring.

No. 168,832. Patented Oct. 19, 1875.

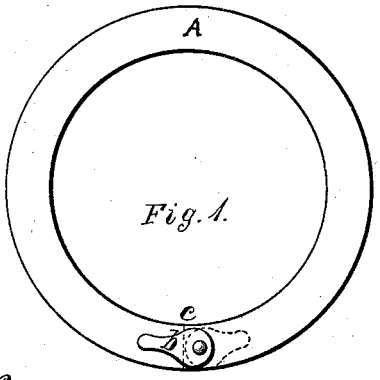


Fig. 1.

Fig. 2.

Fig. 3.

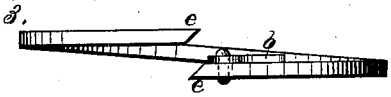
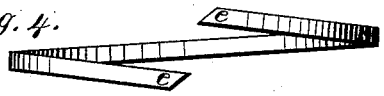


Fig. 4.



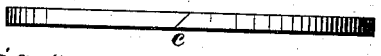


Fig. 5.

Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM L. DENIO AND WILLIAM E. NEER, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN KEY-RINGS.

Specification forming part of Letters Patent No. **168,832**, dated October 19, 1875; application filed February 1, 1875.

To all whom it may concern:

Be it known that we, WILLIAM L. DENIO and WILLIAM E. NEER, residents, respectively, of the city of Rochester, in the county of Monroe and State of New York, have jointly invented certain new and useful Improvements in Key-Rings; and we do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, sufficient to enable those skilled in the art to which it appertains to construct and make use of the same, reference being had to the drawings accompanying this specification, and to the figures and letters of reference marked thereon, in which like letters refer to like parts throughout the specification.

This invention relates to a ring for securing and retaining in a convenient way the various trunk, door, or other keys in common use, and is the same for which a caveat was filed on the 30th day of October, 1874.

The objections to the ordinary coil-ring are threefold. It requires, first, too much time to insert and release the key; second, to give the desired elasticity to hold the lap in place, it must have so much rigidity that in opening the lap for inserting the key, the finger ends and nails are abraded; and, third, in opening the lap for the key the displacement is made in so short a part near the ends of the ring that the metal becomes bent, and does not react into the plane of the ring, but leaves the projecting ends to wear the pocket and mar the fingers.

Equally objectionable is the flat metal ring which secures the parts by a clasp over its periphery, leaving a jagged edge for the hand. In addition, up to the present time, the cost of the rings offered to the public has prevented their general use; and the object of our improvement is to furnish a ring free from all these above-enumerated objections.

It consists, first, in a flat ring, cut from sheet metal, opened for the key by a radial lap-joint; second, in a lock or button riveted to the disk of the ring near the lap-joint, by which the parts are closed, and held in the same plane, as desired.

Figure 1 represents the ring as cut, with a die, from sheet metal. Its material, diameter, width, and thickness are as desired. Fig. 2 shows the same edgewise, and the lap-joint by which the rim is severed for the reception of the key. Fig. 3 shows the sloping radial cut, having the ends bent, and requiring about the same force to bring them back into the plane of the ring, as before, to part them.

When brought into line, as shown in Fig. 2, the button *b* is turned from its position in Fig. 3, over the beveled cut *c*, rigidly securing the parts, to which condition it is assisted by the tendency of its ends to separate. The different positions of the button on the disk are further seen where the dotted lines show its position when open, and the black lines when closed. At rest, the severed parts are held, as shown at Fig. 4, but readily yield to a gentle pressure.

The ends *e e* are bent in opposite directions sufficient to remain apart, by which operation, when again brought together, they have a tendency to remain closed.

In the closed condition they are placed in a clamp, and the ends forced past each other sufficient to remain closed, as before severed, as shown at Fig. 5.

By this construction a key-ring is furnished, at the same time more convenient for use, and cheaper to the purchaser than any other key-ring known to us.

Having now fully described the construction and operation of our invention in key-rings, what we claim, and wish to secure by the United States Letters Patent, is—

A metal key-ring, consisting of the flat annular part A, provided with the overlapping bevel-joint *c*, and adapted to be closed by means of the button *b*, substantially as set forth.

In testimony whereof we have hereto set our hands this 27th day of January, A. D. 1875.

WILLIAM L. DENIO.
WILLIAM E. NEER.

Witnesses:
FRANK KINGSLEY,
WILSEY G. BARNES.