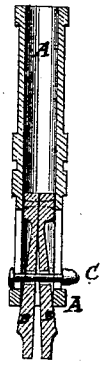
J. S. BIRCH.

Watch Key.

No. 102,753. Patented May 10, 1870.

Fig. 1

Fig. 2



Witnesses:

A. W. Almquist

Alex. F. Roberts

Inventor:

J. S. Birch

Per Munn & Co

Attorneys.

United States Patent Office.

JOHN S. BIRCH, OF NEW YORK, N. Y.

Letters Patent No. 102,753, *dated May* 10, 1870.

IMPROVEMENT IN ADJUSTABLE WATCH-KEYS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN S. BIRCH, of New York city, in the county and State of New York, have invented a new and useful Improvement in Self-adjusting Watch-Keys; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side view of my improved watch-key.

Figure 2 is an enlarged longitudinal section of the same.

Similar letters of reference indicate corresponding parts.

My present invention is an improvement on the keys for which I have obtained Letters Patent bearing date, respectively, November 12, 1867, and April 13, 1869; and

The improvement contemplates producing a key that shall be simpler in construction, less liable to become injured or broken, and may be more easily and quickly operated, as well as more economically manufactured.

A represents a short tube, in which the jaws B slide, and which may be provided with ring projections or collars for convenience in holding and operating the instrument.

B are the jaws, the inner surface of the outer ends of which are notched upon their inner sides, to receive and grasp the arbor of the watch or other object to be held.

The jaws B get gradually thinner from the shoulders of their outer ends to their necks, or their enlargement at their inner ends; but their outer surfaces are so formed as to be always the arc of a circle in their cross-section, wherever said cross-section be made.

The jaws B may be made in two pieces, secured to each other by a rivet passing transversely through their inner ends.

The thinner part of the jaws B is made so thin, and is so formed, that its elasticity will always hold the outer surfaces of said jaws pressed against the inner surface of the tube A, so that the jaws will open automatically as they are forced out of the said tube A, and will close as they are drawn back into said tube.

In case the jaws B are hinged at their inner ends, a small spring should be placed between them of sufficient strength to force them apart as they move out of the tube A.

C is a stay-pin, which passes transversely through the jaws B, and through a slot in the tube A.

Knobs, heads, or slides may be formed upon or attached to the ends of the pin C, to enable it to be used for pushing the jaws B out of the tube A, and drawing them into said tube; the main object of the pin C being to resist the turning pressure upon the jaws when the key is being used.

Having thus described my invention,

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

The improved watch-key, consisting of the case A, provided with opposite longitudinal slots, in which the stay-pin C slides, the same passing transversely through the slot in the spring-jaws B B, (riveted together at their inner ends, and made semicircular in cross-section,) all arranged as specified, whereby the pin supports the strain when the key is being used.

The above specification of my invention signed by me this 25th day of June, 1869.

J. S. BIRCH.

Witnesses:

FRANK BLOCKLEY,

JAMES T. GRAHAM.