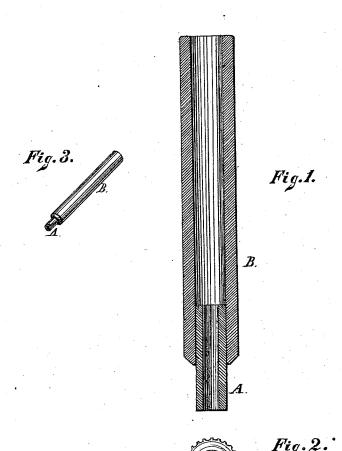
## A. & C. A. WANNER. Watch-Key.

No. 161,306.

Patented March 23, 1875.



Mathingsness Cham Demans Inventors: A Wasser EA Wanner

## UNITED STATES PATENT OFFICE

ALBERT WANNER AND CHARLES A. WANNER, OF NEW YORK, N. Y.

## IMPROVEMENT IN WATCH-KEYS.

Specification forming part of Letters Patent No. 161,306, dated March 23, 1875; application filed November 17, 1874.

To all whom it may concern:

Be it known that we, ALBERT WANNER and CHARLES A. WANNER, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Watch-Keys, of which the following

is a specification:

This invention relates to certain improvements in watch-keys, and is intended to improve that class in which the barrel has been diametrically divided, and each section formed with a V-shaped groove, so that when brought together a square opening is produced, means being provided for expanding or contracting the sections, so as to reduce or increase the size of the opening in the barrel. Such construction has a tendency to injure the delicate sharp corners of the winding-arbor as the square arbor forces the sections apart, its corners coinciding with the meeting-points of the sections, resulting in a torsional strain, and hence injury to both the key and the arbor.

The object of our invention is to construct the barrel in sections, with the interior so shaped that the pressure of the key in winding the arbor will be exerted directly against the sides of the two sections, obviating all tendency to separate the sections, since the corners of the arbor never come in contact with the meeting-points of the sections, the result being that by my mode of construction a strong and durable key is produced, and one that cannot injure the arbor of the watch. To this end our invention consists in a pipe or barrel of a watch-key made in two sections, each section having two right angles, in combination with a cylinder or coliar embracing said sections, and rigidly fastened to the same, in such a manner that the manufacture of watch-keys is materially facilitated, and at the same time a strong and durable article is ob-

Figure 1 represents a longitudinal section on an enlarged scale. Fig. 2 is an end view. Fig. 3 is a perspective view on a smaller scale than the previous figures.

In the drawing, the letter A designates the

band of our watch-key, which is formed of two sections, x x, each of which contains two right angles, n n, said sections being joined in the plane indicated by the line oo, Fig. 2. The two sections x x are fastened together by a collar or cylinder, B, which is firmly and permanently secured to and around the same, and which, when made in the form of a cylinder, as shown, forms the handle of the watchkey.

By dividing the barrel so that each section contains two right angles, the strength and durability of our watch key are materially im-

proved.

If the barrel is divided diagonally, so that each section contains only one right angle, the sides of these sections are liable to spread open in a short time, and the key becomes useless.

In our key each section of the barrel preserves its full strength, and said sections can be easily produced in any desirable size, either by suitable rollers or by milling tools, and when they are secured in the collar or cylinder B they produce a cheap and durable watch-

What we claim is—

A watch-key consisting of the barrel A, composed of two sections, each section having one side of its interior of a width equal to the width of the arbor to be wound, and two sides at right angles thereto and parallel with each other, said sections being permanently connected together by a cylinder or collar, substantially as herein shown and described, whereby an imperceptible joint is formed, and the corners of the arbor to be wound are prevented from acting upon the meeting-points of the sections composing the barrel, as set forth.

The above specification of our invention signed by us this 2d day of November, 1874.

A. WANNER. C. A. WANNER.

Witnesses:

MATHEW NUGENT, ALBRAM BANARD.