

S. H. CATE.
Winding Attachment for Watches.

No. 221,666.

Patented Nov. 18, 1879.

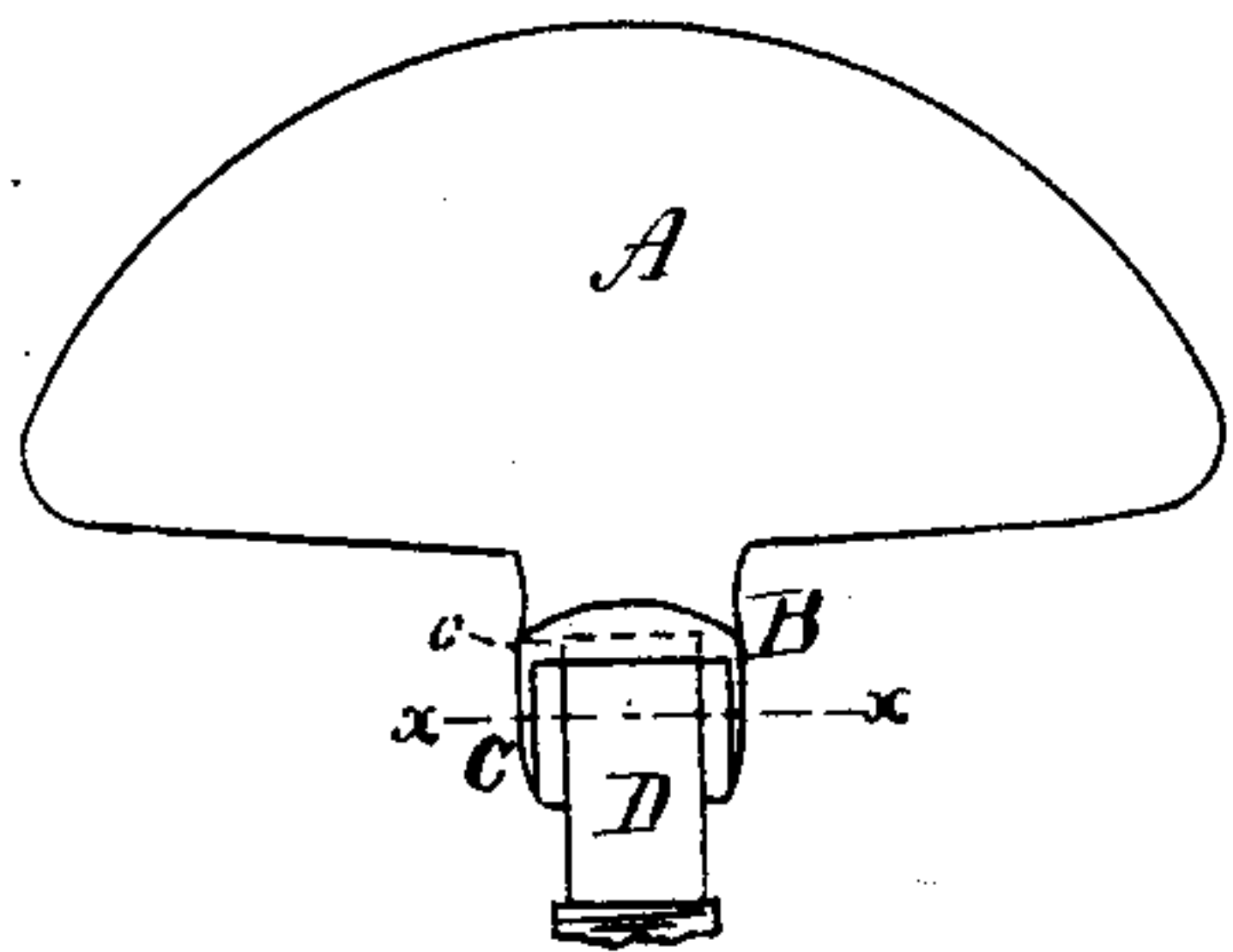


Fig. 1.



Fig. 2.

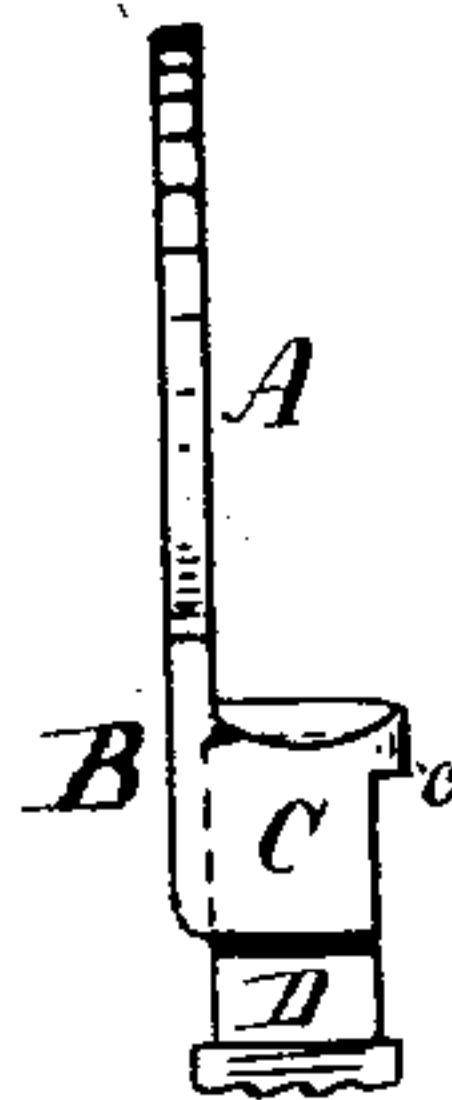


Fig. 3.

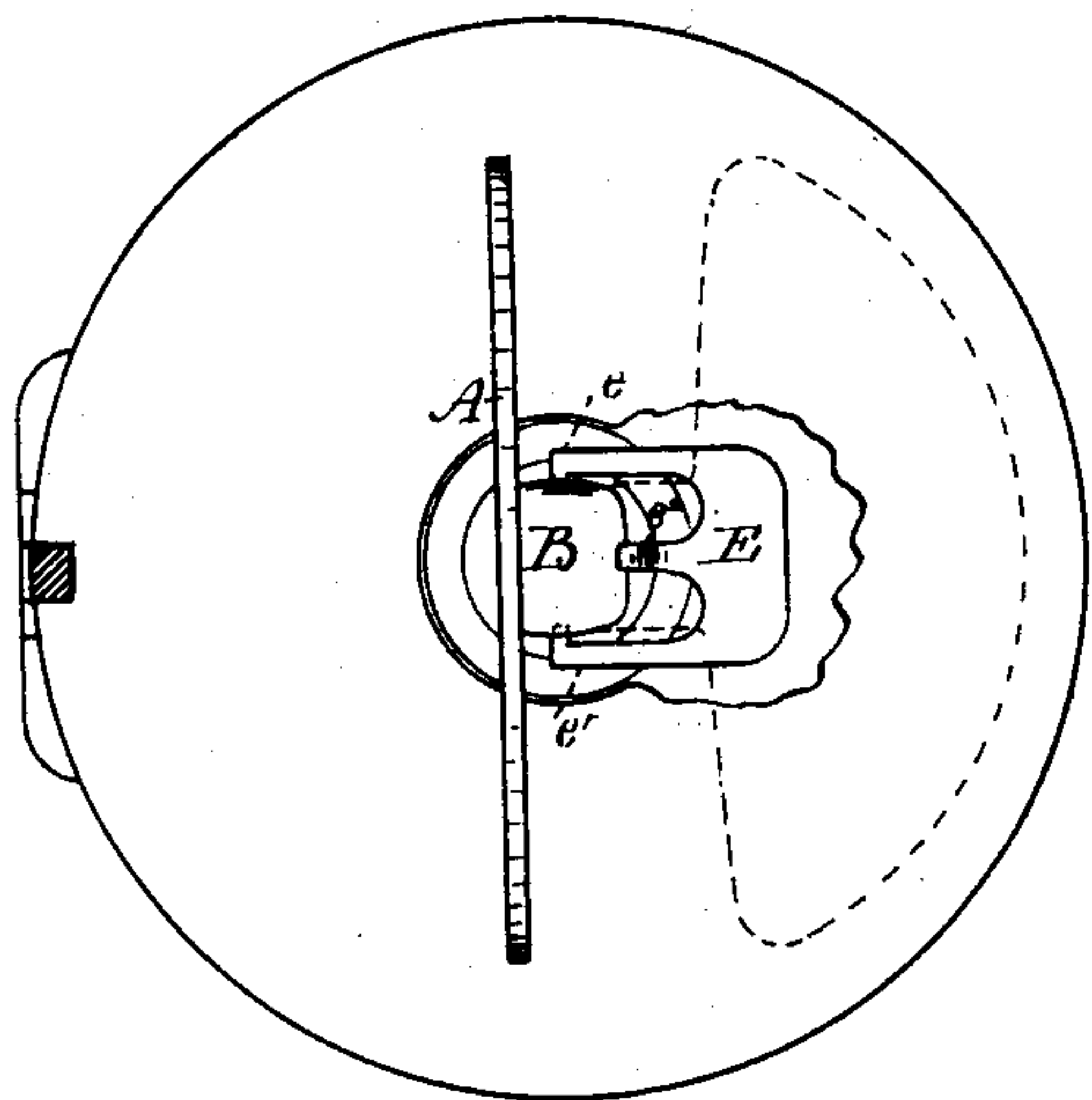


Fig. 4.

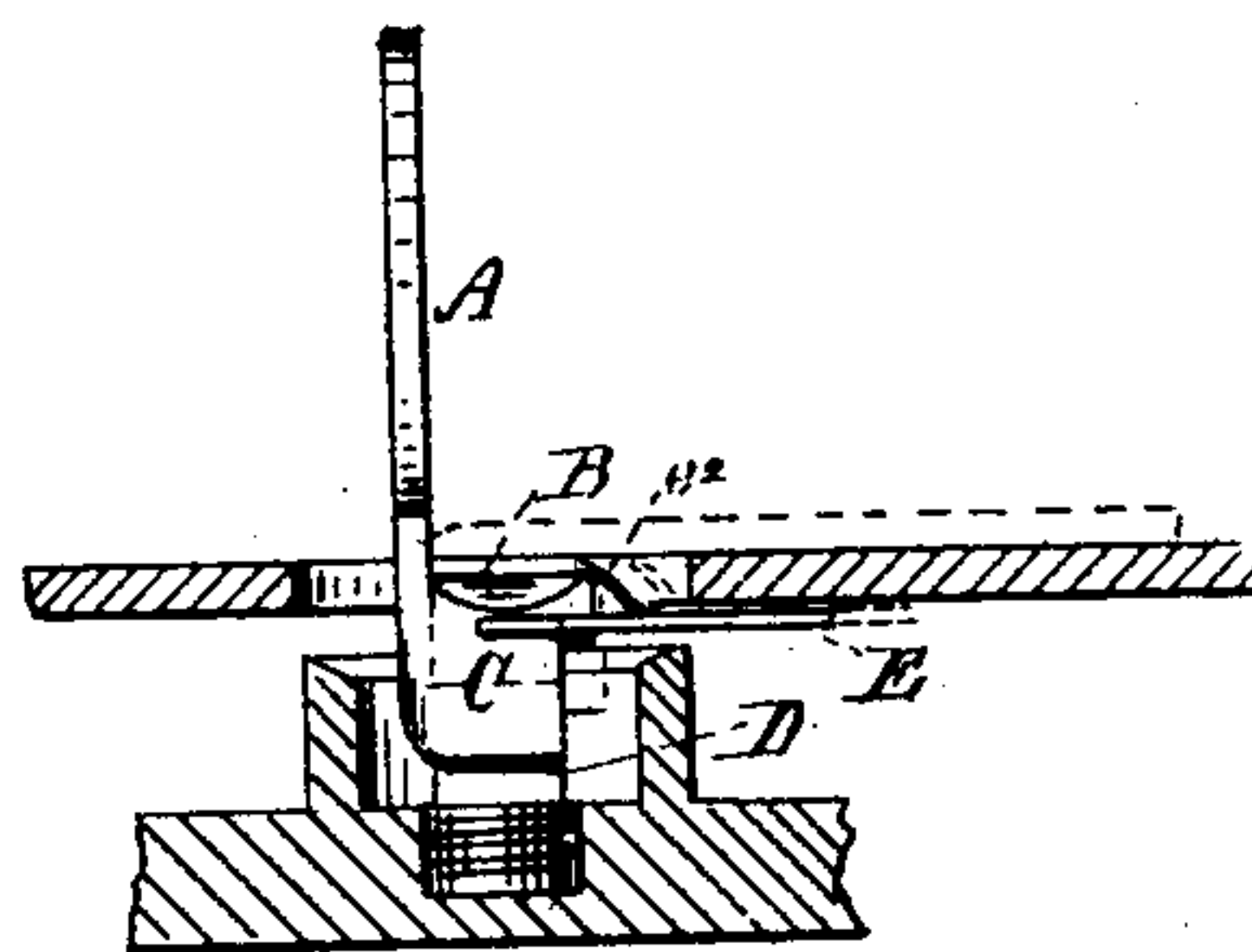


Fig. 5.

WITNESSES

Frank G. Parker.
Frank L. Fuller.

INVENTOR

Silas H. Cate

UNITED STATES PATENT OFFICE.

SILAS H. CATE, OF WATERTOWN, MASSACHUSETTS.

IMPROVEMENT IN WINDING ATTACHMENTS FOR WATCHES.

Specification forming part of Letters Patent No. **221,666**, dated November 18, 1879; application filed May 28, 1879.

To all whom it may concern:

Be it known that I, SILAS H. CATE, of Watertown, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Watch-Keys, of which the following is a specification.

The nature of my invention consists in forming the pipe of a watch-key with nearly the whole of one side removed, so that it may still act as a wrench for turning the winding-stem, and be free to be turned down flat onto the inner case of the watch without being removed from the hole in the said case, the handle part of the key being made so small, flat, and thin that the entire key can remain and allow the outer case to be closed.

It also consists in combining with the said key a thin hinged piece, which lies partly below the inner case, and thus holds the key to it.

In the drawings, Figure 1 is an elevation, showing an enlarged view of the key and the winding-stem of the watch. Fig. 2 is a horizontal section of the same, taken through the line *xx* of Fig. 1. Fig. 3 is an elevation of my invention, taken at right angles to the view shown in Fig. 1. Fig. 4 shows a plan of the key having the hinged holding-flap attached. It also shows a part of the inner case of the watch. Fig. 5 is an elevation of my invention, showing the hinged holding-flap lying under the inner case, also indicating by dotted lines the position of the key when the same lies down between the inner and outer cases.

Let A, B, and C represent, respectively, the handle, shank, and pipe of the key. The pipe part C of the key has a square prismatic opening made in it to receive the square part of the winding-stem or arbor of the watch. This opening is at its extreme upper end, as indicated by dotted lines, inclosed on all four sides;

but for most of its length one side is open to admit of the key being turned down, as shown by the dotted lines in Fig. 5.

From the peculiar construction of the pipe C, it will be readily understood that when the key is erect, as shown in Figs. 1 and 3, it has a firm grasp on the top part of the winding-stem, the part indicated by *c* completing the square around the stem, and when this is swaged from fine steel it is amply strong for winding the watch.

The part E, which, when combined with the key, forms the second part of my invention, consists of a thin flat piece of metal cut or stamped with three prongs, *e e' e''*. (See Fig. 4.) Two of these prongs, *e' e''*, have inwardly-turned ends, which enter into the sides of the shank B of the key, and thus form a hinge for the whole flap to turn upon. The prong *e''* rests on the top of the shank, as shown in Figs. 4 and 5. The use of this flap E is to hold the key from dropping off when the outer case is open.

To insert the key, the outer case is open wide and the inner one partly open, so that the flap E may be inserted in the key-hole. The flap is then turned so as to lie nearly flat with the case, which may now be closed, which action will secure the key to it.

I claim—

1. The watch-key composed of the parts A, B, C, and *c*, formed substantially as described, and for the purpose set forth.

2. The combination of the key A, B, C, and *c* with the hinged flap E *e e' e''* and the inner case of the watch, substantially as described, and for the purpose set forth.

SILAS H. CATE.

Witnesses:

E. H. LINCOLN,
WILLIAM COGAN.