

(No Model.)

H. G. SKIDMORE.

WATCH KEY.

No. 310,737.

Patented Jan. 13, 1885.

Fig. 1.

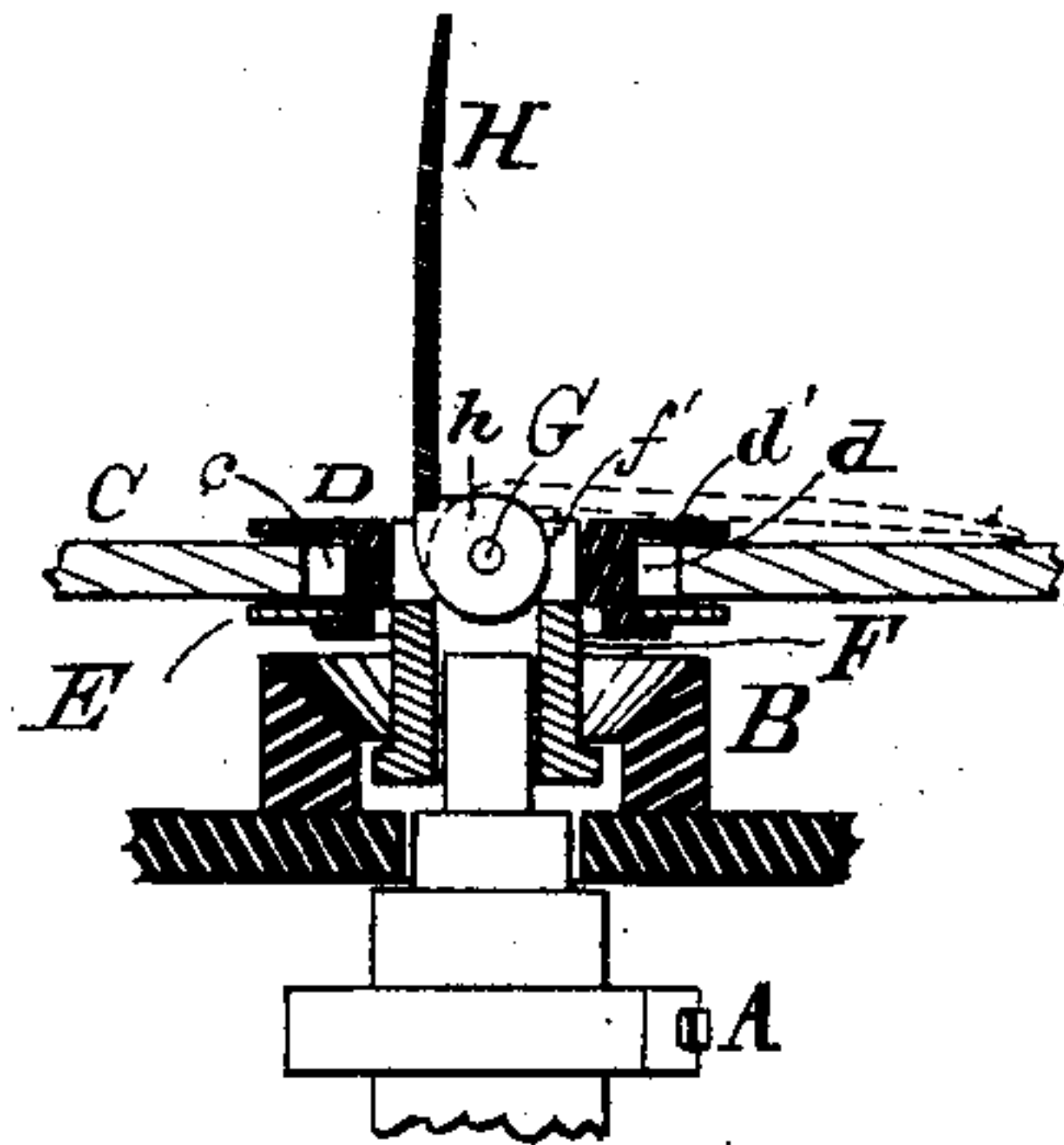


Fig. 4.

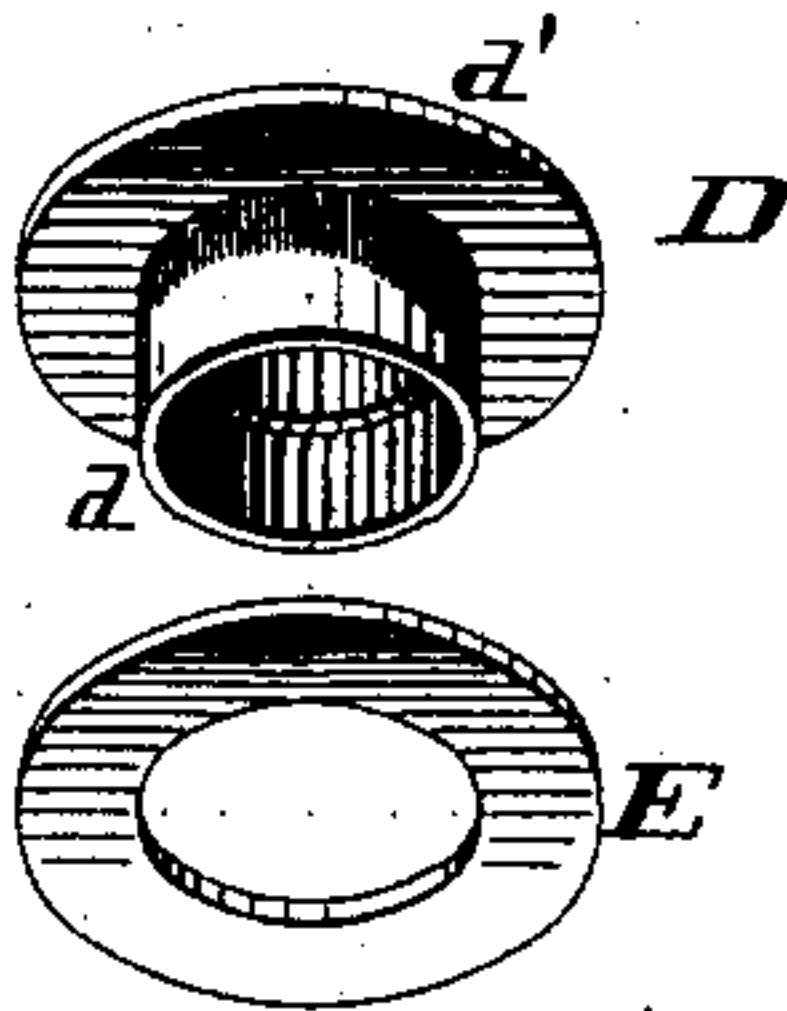


Fig. 5.

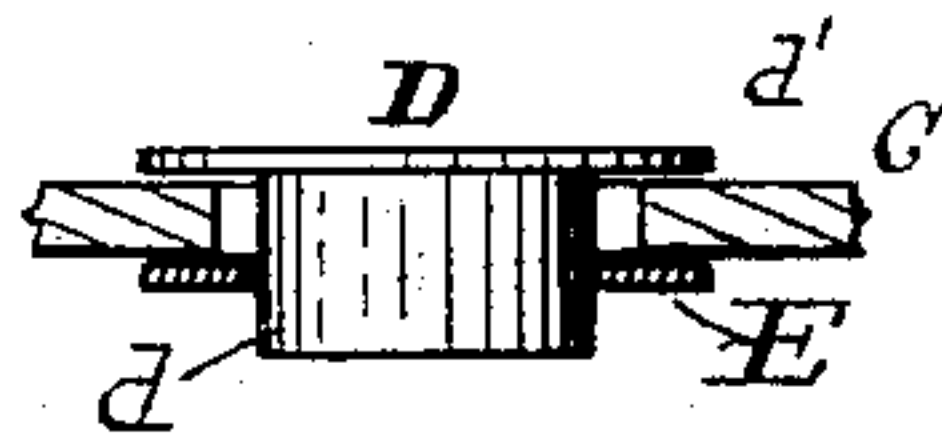


Fig. 2.

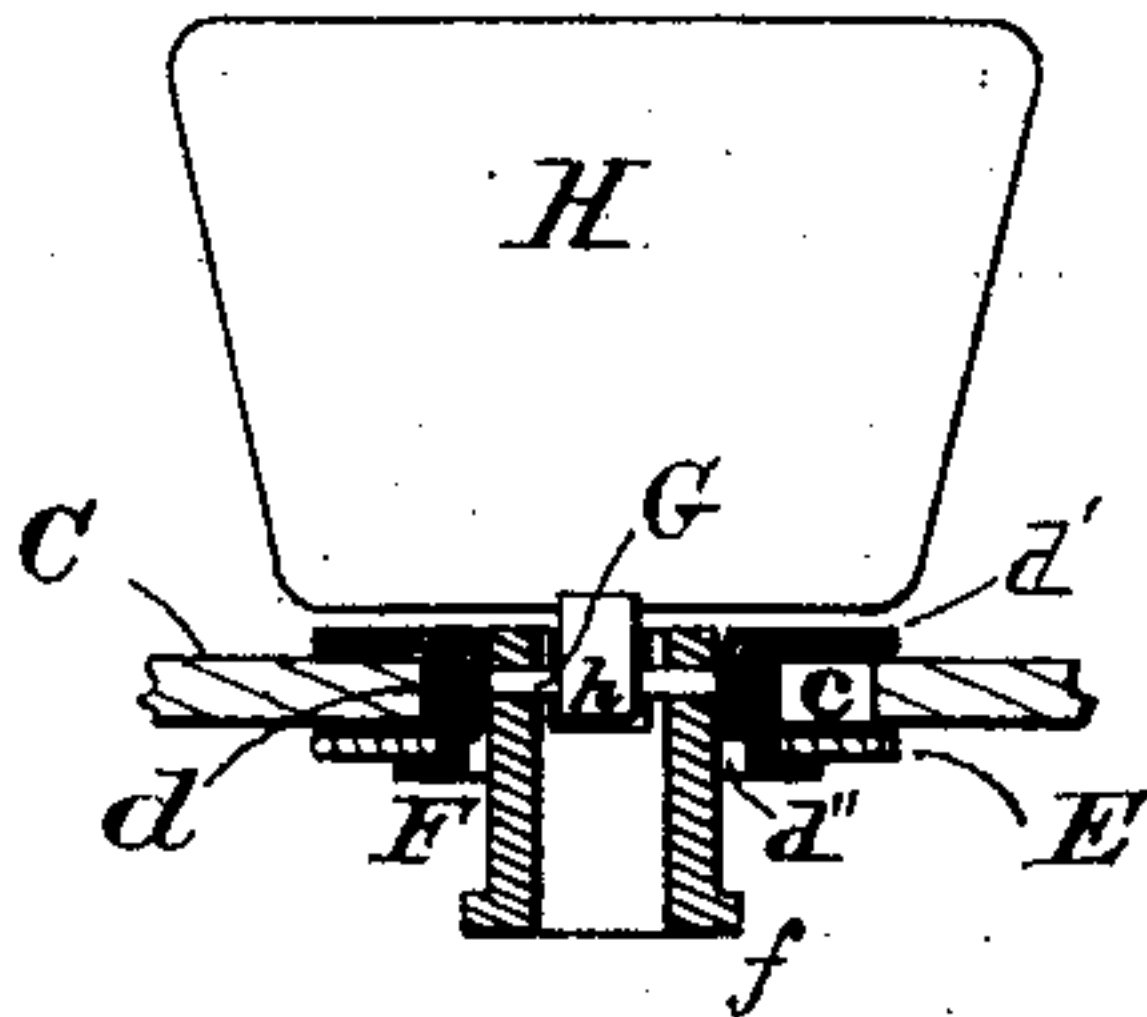


Fig. 3.

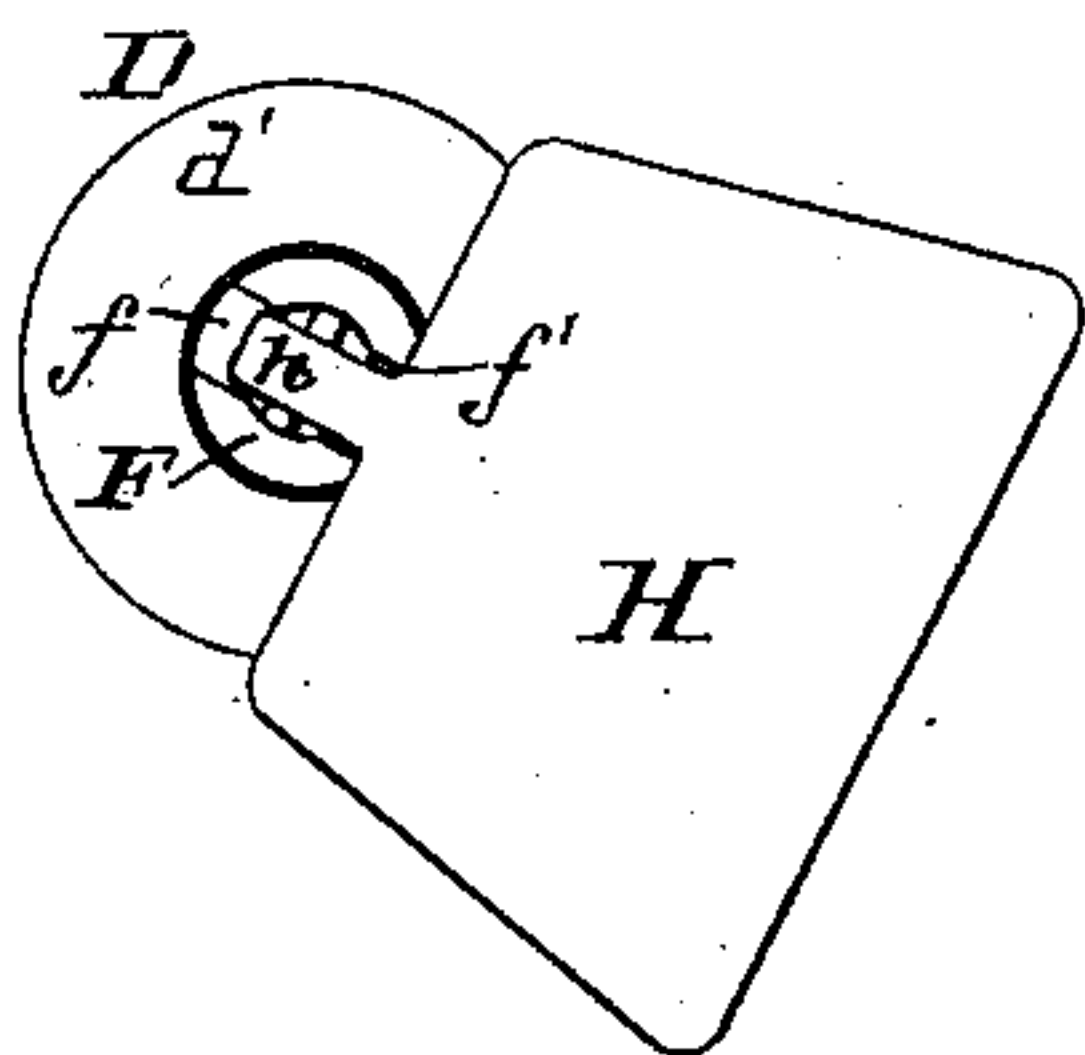
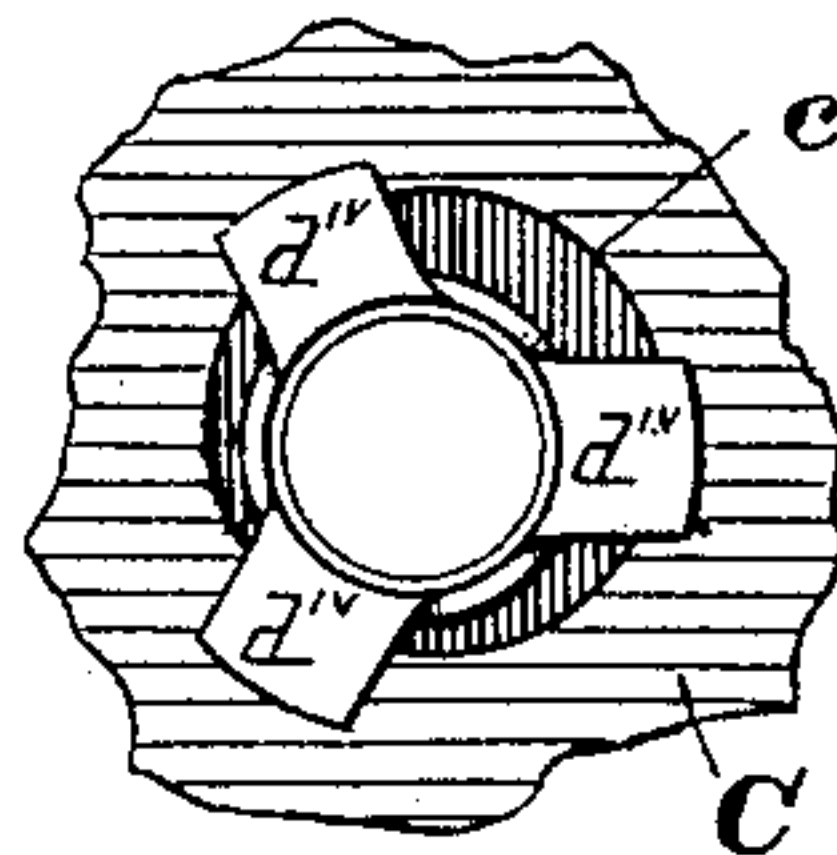


Fig. 6.



Attest:

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UNITED STATES PATENT OFFICE.

HORACE G. SKIDMORE, OF CINCINNATI, OHIO.

WATCH-KEY.

SPECIFICATION forming part of Letters Patent No. 310,737, dated January 13, 1935.

Application filed April 4, 1884. (No model.)

To all whom it may concern:

Be it known that I, HORACE G. SKIDMORE, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Watch-Winding Devices, of which the following is a specification.

My invention relates to an improvement in those devices in which the watch-winding mechanism is a fixture upon the inner rear cap or back—such, for example, as forms the subject-matter of Patent No. 294,466, granted to myself and C. Wesley Harman, March 4, 1884, to which reference may be made for parts not here shown.

A leading object of my present invention is a construction of such key which makes it self-adaptive to the position of the winding-arbor of the particular watch to which it may be applied. The construction of my present improvement is, further, such as to combine extreme simplicity and compactness of parts with durability and easy application to any "key-winding" watch.

In the accompanying drawings, Figures 1 and 2 are axial sections of my device, in which the hinged winder blade or handle is shown in its erect or operative position, the said handle in Fig. 1 being at right angles to, and in Fig. 2 parallel with, the section, Fig. 1 showing a portion of the mainspring winding-arbor and a surrounding guard. Fig. 3 is a plan of the device, in which the handle is shown in its normal or folded condition. Fig. 4 is a perspective view showing my eyelet and washer detached. Fig. 5 shows, partly by axial section and partly by elevation, an eyelet and washer in position preparatory to the upsetting of the eyelet-edge. Fig. 6 shows a modification of my eyelet.

A, B, and C may, respectively, represent portions of the mainspring-arbor, of the arbor-guard, and of the inner rear cap or back of any key-winding watch. The cap C has a large circular orifice, *c*, which receives the neck *d* of an eyelet, D, the diameter of whose said neck is so much less than that of the orifice *c* as to permit considerable lateral play of said eyelet within said orifice. Said eyelet has at its outer end a flange, *d'*, of so much greater diameter than the said orifice as to completely close it externally in every posi-

tion of said eyelet. After insertion of said eyelet in said cap-orifice *c*, a washer, E, is slipped over it, as shown in Fig. 5, and then the edge of the neck is bent or upset around the said washer's inner edge, as shown in Figs. 1 and 2, so as to so lock the said eyelet within the said cap-orifice as, while permitting lateral play or shift of said eyelet in every direction, to at the same time prevent its escape from the said orifice. The under portion of the said eyelet is preferably so counterbored as to present a rabbet, *d''*.

F represents a short winding-pipe having a cylindrical periphery that fits, without binding, the interior of the eyelet D, a flange, *f*, at its inner end, that, in conjunction with the rabbet *d''*, operates to limit the outward play of the pipe, and the customary square bore to embrace the winding-arbor. The outer end of said pipe has two diametrically-opposite notches, *f'*, for play of knuckle *h* of blade or handle H, that is hinged to said pipe by the pivot G. Said handle is so formed and applied as, in its normal condition, to fold snugly down upon the cap, as shown in Fig. 3, and by dotted lines in Fig. 1, yet so as, when desired for use in winding, to be capable of erection, as shown in Fig. 2, and by strong lines in Fig. 1.

The device is applicable to any key-winding watch, but is preferably associated with a watch having a customary funnel-formed guard, B, around its winding-arbor, and is here illustrated in connection with such a watch.

The device being attached in the manner explained, closure of the cap C brings the inner end of pipe F in contact with the guard B, and is by it automatically conducted to its place upon the winding-arbor.

The above-described preferred form of my improvement may be modified in non-essential particulars. For example, the eyelet may terminate at its interior end in two or more lips, *d''*, which may be upset either over a washer or directly against the inner face of the cap, as shown in Fig. 6.

I claim as new and of my invention—

1. The winding attachment for watches, consisting of a short winding-pipe, F, having a retaining-flange, *f*, and a hinged handle, H,

said pipe occupying an eyelet, D, so locked within an orifice, *c*, in the inner back of the watch as to be capable of lateral play, substantially as set forth.

- 5 2. The combination, in a winding device for watches, of short winding-pipe F, having detaining-flange *f*, and hinged handle H, occupying an eyelet, D, which is so locked (around a washer, E) within an orifice in the
10 rear cap of the watch as to be capable of lateral play, as and for the purpose explained.

3. The combination, with a watch which has

a funnel-formed guard to its winding-arbor, of the short winder or key pipe, F, within an eyelet, D, that occupies and is locked loosely 15 within an orifice in the inner back of the watch-case, substantially as set forth.

In testimony of which invention I hereunto set my hand.

HORACE G. SKIDMORE.

Attest:

GEO. H. KNIGHT,
S. S. CARPENTER.