(No Model.)

W. W. DUDLEY.

TOOL FOR CLOSING MAINSPRING BARRELS.

No. 357,584. Patented Feb. 15, 1887.

Fig. 1.

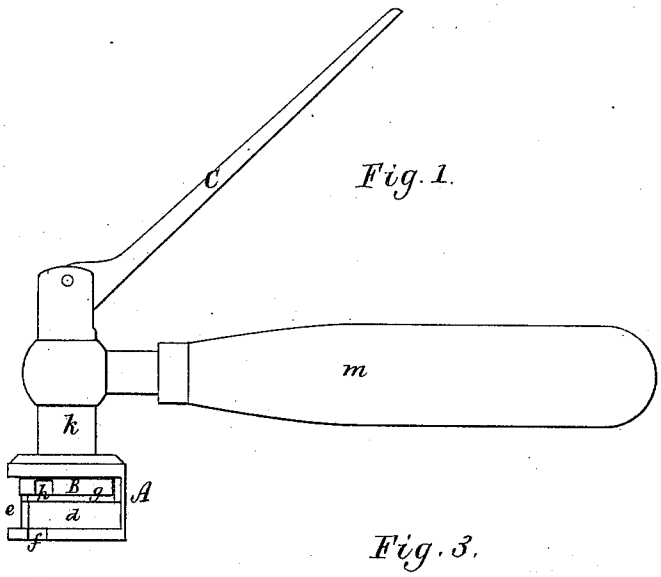


Fig. 2.

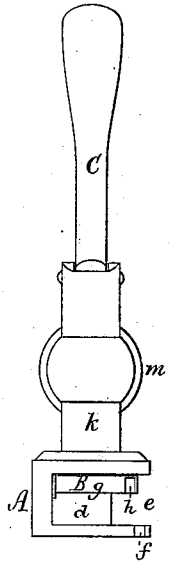


Fig. 3.

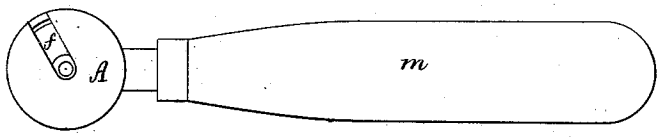


Fig. 7.

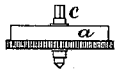


Fig. 8

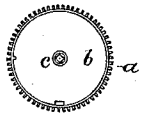


Fig. 9.

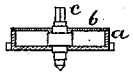


Fig. 4.

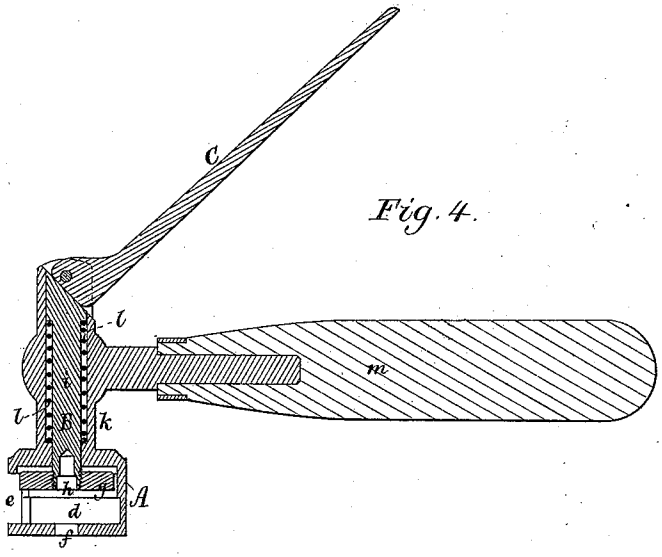


Fig. 5.

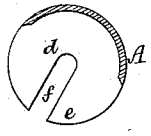
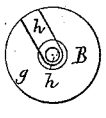


Fig. 6.



Witnesses.
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C. F. Daniels

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UNITED STATES PATENT OFFICE.

WILLIAM WALLACE DUDLEY, OF WALTHAM, MASSACHUSETTS.

TOOL FOR CLOSING MAINSPRING-BARRELS.

SPECIFICATION forming part of Letters Patent No. 357,584, dated February 15, 1887.

Application filed October 16, 1886. Serial No. 216,424. (No model.) Patented in Canada October 25, 1886, No. 25,203.

To all whom it may concern:

Be it known that I, WILLIAM WALLACE DUDLEY, a citizen of the Dominion of Canada, and a resident of Waltham, in the county of Middlesex, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Implements or Mechanism for Inserting a Cover in the Mainspring-Barrel of a Watch or Time-Piece; and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 a front end view, Fig. 3 a bottom view, and Fig. 4 a longitudinal section, of a machine or instrument embodying my invention, the nature of which is defined in the claim hereinafter presented. Fig. 5 is a horizontal section taken through the barrel-receiving chamber. Fig. 6 is a bottom view of the plunger. Fig. 7 is an edge view, Fig. 8 a top view, and Fig. 9 a transverse section, of the mainspring-barrel of a watch, such showing the cover in place.

In the last three figures the barrel-body is exhibited at *a*, its cover at *b*, and the spring-winding arbor at *c*, the barrel in its upper part being rabbeted to receive the cover. The winding-arbor extends, as represented, in opposite directions from the bottom of the barrel and top of the cover.

The cover-inserter is to enable a watch-maker to expeditiously press the cover into place within the upper part of the mainspring-barrel.

In the drawings the head A of the implement is shown as provided in its lower part with a cylindrical chamber, *d*, having in its periphery a mouth or opening, *e*, of sufficient size to admit of the introduction of a mainspring-barrel into the said chamber. In the bottom of the chamber is a radial groove or slot, *f*, which extends from the central part to and through the circumference of such bottom. Within the said chamber and head there is a plunger, B, whose head *g* is circular and has in it a groove, *h*, extending from its central part to and through the periphery of such head, such groove being directly over the groove or slot *f*. The shank *i* of the plunger is tubular in its lower part, and adapted to slide upward and downward within the stem portion *k* of the head A, in which, and suitably applied to it and the shank *i*, is a spiral spring, *l*, for raising the plunger. A handle, *m*, extends from the stem *k* at right angles thereto, and there is fulcrumed within the upper part of such stem a lever, C, for depressing the plunger, such lever bearing on the upper end of the shank of such plunger, and being formed as represented.

Preparatory to using the cover-inserter the watch-mainspring barrel to receive its cover is to have such cover placed loosely on the upper part of the winding-arbor, with such part extending through the hole at the central part of the cover. Under this condition of the barrel and cover both are to be placed within the chamber *d*, so as not only to have the barrel rest on the bottom of such chamber, but the projecting parts of the arbor in the grooves or slots of the plunger and such bottom, such grooves or slots determining the extent of introduction of the barrel, in order for it to be concentric, or about so, with the bottom of the plunger. This having been effected the lever is to be depressed, in order to force the plunger downward and cause it to press the cover firmly into the rabbet of the barrel.

The instrument or implement thus described is a very important aid to a watch-maker, as it affords him a ready means of properly and rapidly inserting in watch-spring barrels their covers after such barrels may have had their springs and winding-arbors duly applied to them.

I claim—

The watch-spring-barrel-head inserter, substantially as described, composed of the shanked head A, furnished with a handle, *m*, extending laterally from it, and with a cylindrical chamber, *d*, having in its side a mouth, *e*, and in its bottom a radial slot or groove, *f*, as specified, the plunger B, having a radial groove or slot, *h*, in its head *g*, and arranged within such head A, as represented, the spring *l*, for elevating the plunger, and the lever C, for depressing such plunger, all being arranged and to operate essentially as specified.

WILLIAM WALLACE DUDLEY.

Witnesses:

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