

W. W. DUDLEY.
HAIR SPRING STUD HOLDING MEANS.
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1,037,742.

Patented Sept. 3, 1912.

Fig. 1.

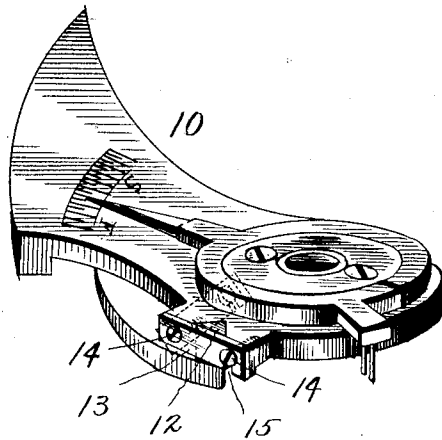
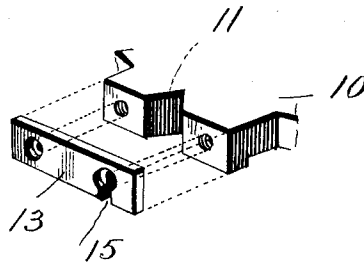


Fig. 2.



WITNESSES

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HAIR-SPRING-STUD-HOLDING MEANS.

1,037,742.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM W. DUDLEY, of Lancaster, in the county of Lancaster, and in the State of Pennsylvania, have invented a certain new and useful Improvement in Hair-Spring-Stud-Holding Means, and do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to means for attaching the outer end of hair or balance springs of watches and other time pieces to the balance cock, and the object of my invention is to provide improved means for this purpose which without any loss of efficiency will possess the important characteristics of simplicity, adjustability for leveling the spring and saving of time in manipulation, both in the factory and in the watch repairer's shop, and to this end my invention consists in the construction and arrangement of parts substantially as hereinafter specified and claimed.

Referring to the accompanying drawings—Figure 1 is a perspective view of enough of a watch movement to illustrate an embodiment of my invention, the stud clamping plate being shown in dotted lines in position permitting the insertion and removal of the stud; and Fig. 2 is a detail view in perspective of the cap and a portion of the balance cock separated.

In the embodiment of my invention illustrated in the drawings, the balance cock 10 is of ordinary construction having in one side near its free end, as usual, a notch 11 for the reception of the hair spring stud 12 which as shown is triangular in cross section and the notch is correspondingly V-shaped. Crossing the open side of the notch and engaging the outer side of the hair spring stud is a cap 13 in the form of a light, flat oblong plate. Passing through holes on opposite sides of the notch, and entering the threaded or tapped holes in the side of the balance cock are two screws 14. The hole in the cap through which one of the screws passes is closed on all sides while a slot 15 extends from the other hole to one side of the cap so that merely by loosening the screws the cap can be swung on one of the screws as upon a pivot to cover or uncover the stud and its notch, and thus without the removal of any of the parts, including the screws, the removal and replacing of the

hair spring stud can be effected. The advantage of avoiding the necessity for the removal of any of these delicate and small parts will be evident to those skilled in the art in the matter of avoiding the loss or displacement of the parts as well as in saving time.

The operation of leveling the spring is greatly facilitated where my invention is used. By the use of the two screws there is no likelihood whatever of deranging or changing the vertical adjustment of the stud by any movement of the cap that might be caused from the friction of the screw head either in loosening or tightening the cap as is the case with such a construction as has heretofore been used wherein but a single holding screw is used.

Having thus described my invention what I claim is—

1. In a device of the class described, the combination of a balance cock, a hair spring stud, a cap overlying the hair spring stud, a pivotal connection between the cap and the balance cock on which the cap swings in a plane parallel with the axis of the balance wheel staff, and a screw passing through a laterally elongated opening or slot in the cap and into the side of the balance cock.

2. In a device of the class described, the combination of a balance cock, a hair spring stud and a cap overlying the hair spring stud, the cock having a stud-receiving notch in one side, the cap extending across the open side of the notch, the cap and stud having surfaces in contact that lie in the same plane, and screws passing through said cap into the side of the balance cock on opposite sides of the notch, the cap being provided with holes for the passage of said screws, one of said screws and its hole forming a pivotal connection between the cap and the balance cock on which the cap may swing in a direction parallel with the balance staff, and one of said holes being extended to one side of the cap and opening thereat.

In testimony that I claim the foregoing I have hereunto set my hand.

WILLIAM W. DUDLEY.

Witnesses:

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