

(No Model.)

A. MERKELBACH.

WATCH REGULATOR.

No. 318,780.

Patented May 26, 1885.

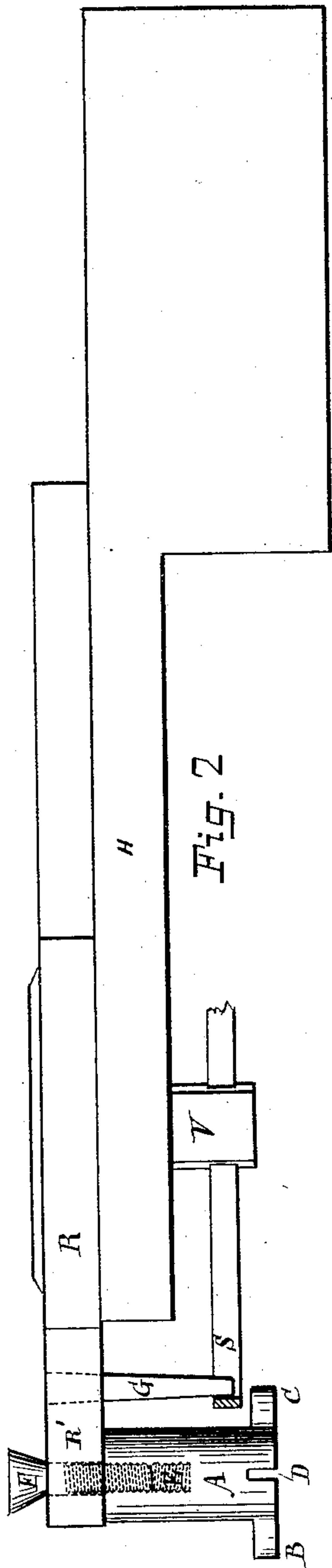


Fig. 2

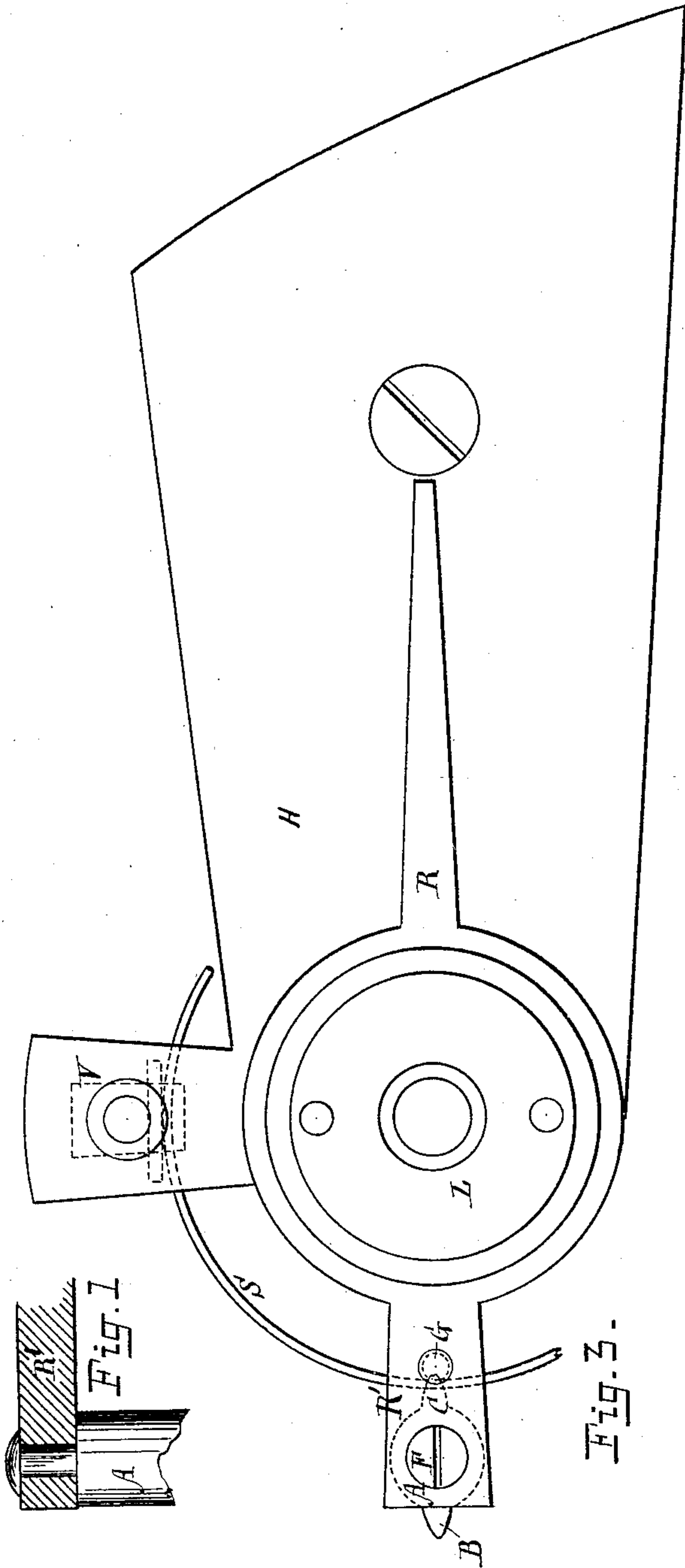


Fig. 1

Fig. 3.

Witnesses

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ADOLF MERKELBACH, OF BIENNE, SWITZERLAND.

WATCH-REGULATOR.

SPECIFICATION forming part of Letters Patent No. 318,730, dated May 26, 1885.

Application filed January 30, 1885. (No model.)

To all whom it may concern:

Be it known that I, ADOLF MERKELBACH, of Bienne, in Switzerland, have invented an Improvement in Watches, of which the following is a specification.

The regulating-lever of a watch is usually provided with a stationary pin and a projecting stud, known as the "regulator-pin." The hair-spring passes in between these two parts and its active length is varied by the movement of the regulator-lever. This regulator-pin has usually been provided with a projecting pin that passes through the regulator-lever and is riveted up. Should the regulator-pin be too long, it cannot easily be shortened, because of the finger at the lower end, which passes beneath the hair-spring, and it is difficult to tighten the regulator-pin should it become loose.

My improvement is made to obviate the aforesaid difficulties; and it consists in the combination, with the regulator-lever, of a regulator-pin having a screw-thread hole passing in at the end that comes next to the lever, and with projecting feet at the other end, and a screw with a conical head passing through the lever into the regulator-pin. By this means the regulator-pin is very securely attached to the lever, and it can be adjusted or removed with facility, and if it is too long the upper end can be filed off, so that the lower end will not be too close to or in contact with the balance-wheel.

In the drawings, Figure 1 shows the ordinary manner in which the regulator-pin is fastened to the regulator-lever. Fig. 2 is a side view, and Fig. 3 is a plan, of my improvement, the parts being drawn upon a magnified scale for greater clearness.

The ordinary balance-bridge, H, is adapted to receive one end of the arbor of the balance-wheel, and the regulator-lever R is made with

an eye and turns upon the center bushing, L, and there is an arm, R', projecting from the lever, that carries the regulator-pin A and the pin G.

The hair-spring S passes between the regulator-pin A and pin G, and it is fastened to the arm V, that projects from the balance-bridge H, as usual.

The regulator-pin has two projecting fingers, B C, one of which is beneath the hair-spring, so as to keep the same from slipping out from between the regulator-pin and the pin G.

There is a central hole bored into the regulator-pin and threaded, and the screw F is passed through a hole in the regulator-lever into the regulator-pin, and the parts are screwed up to firmly hold the regulator-pin in place, there being a slot in the screw-head and another in the regulator-pin for screw-drivers to be used in screwing up the parts. The under side of the screw-head is by preference conical, so that it may wedge tightly into the hole in the regulator-lever.

If the regulator-pin is too long and happens to touch the balance-wheel, the pin can be removed and the end that comes next the regulator-lever filed off, and this renders it unnecessary to file the lower end from which the fingers B C project.

I claim as my invention—

The combination, with the regulator-lever and the pin G, of regulator-pin A, having a screw-threaded hole, and the fingers and a screw passing through the regulator-lever and into the regulator-pin for holding the same, substantially as set forth.

Signed by me this 22d day of December, A. D. 1884.

ADOLF MERKELBACH.

Witnesses:

PHIL. OSTER,

E. IMER-SCHNEIDER.