

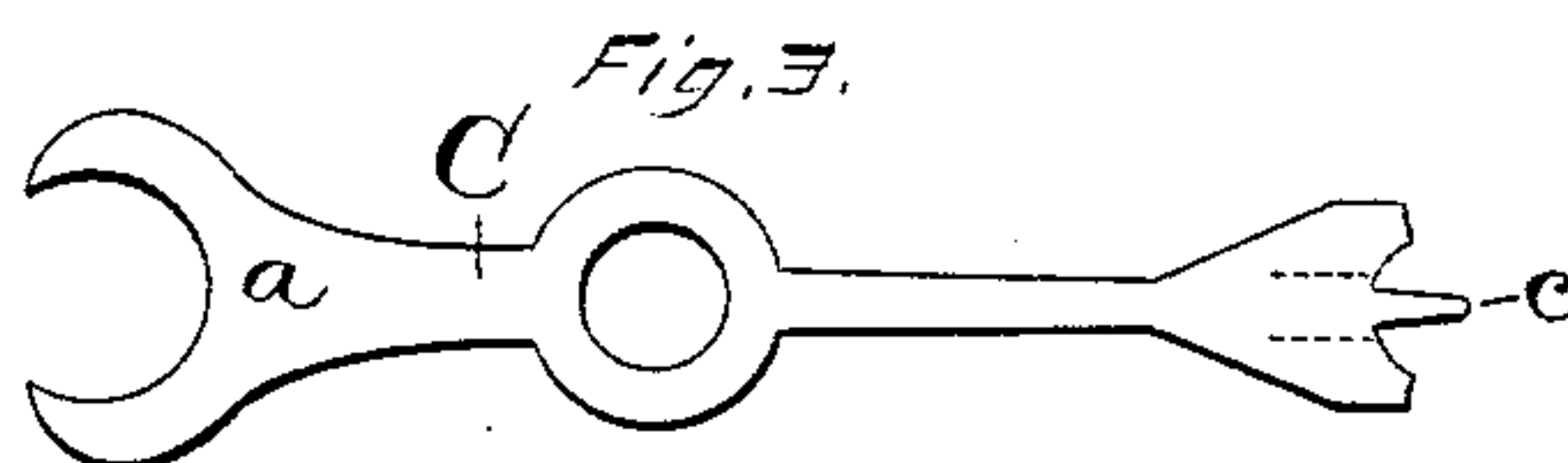
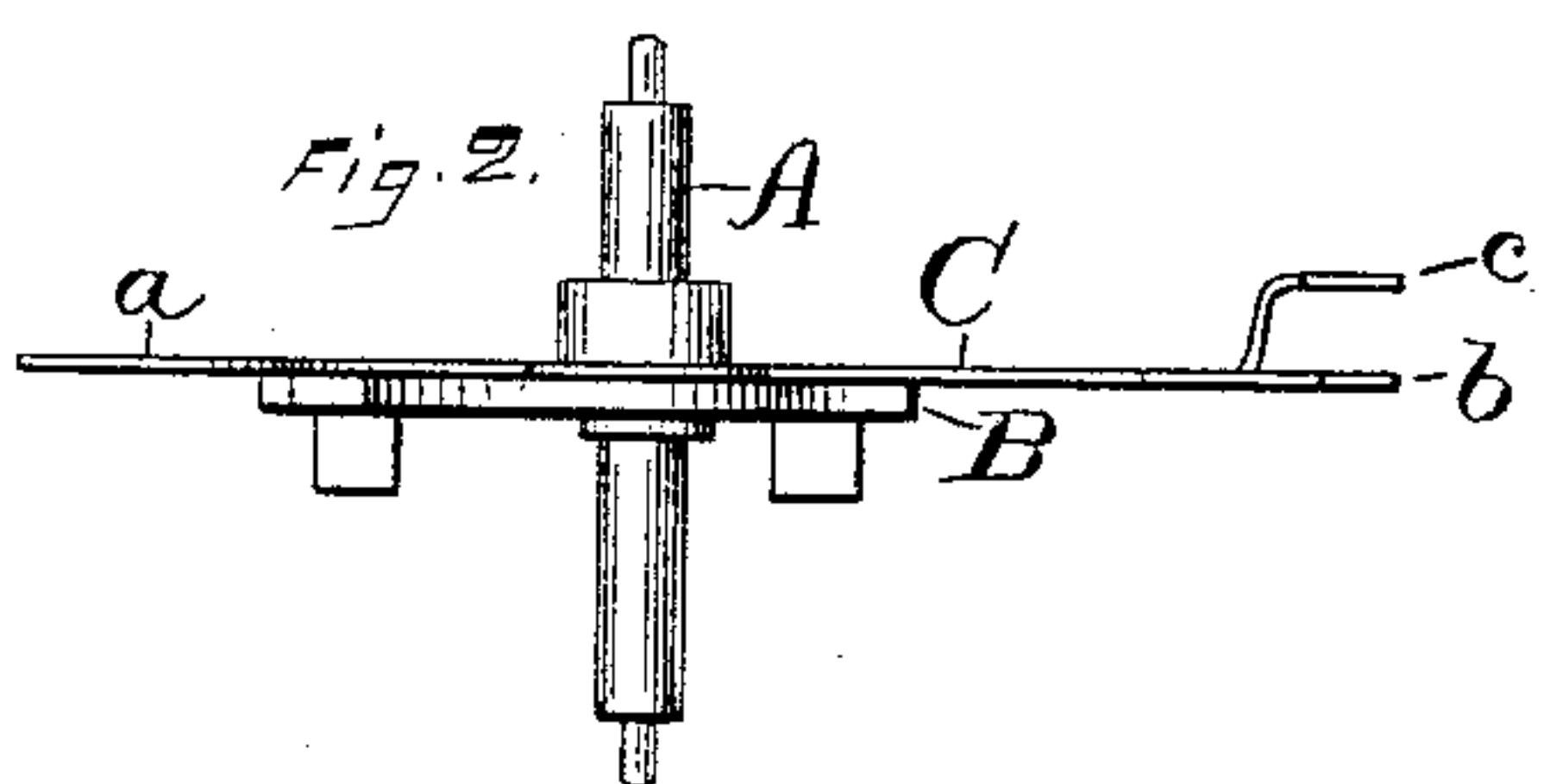
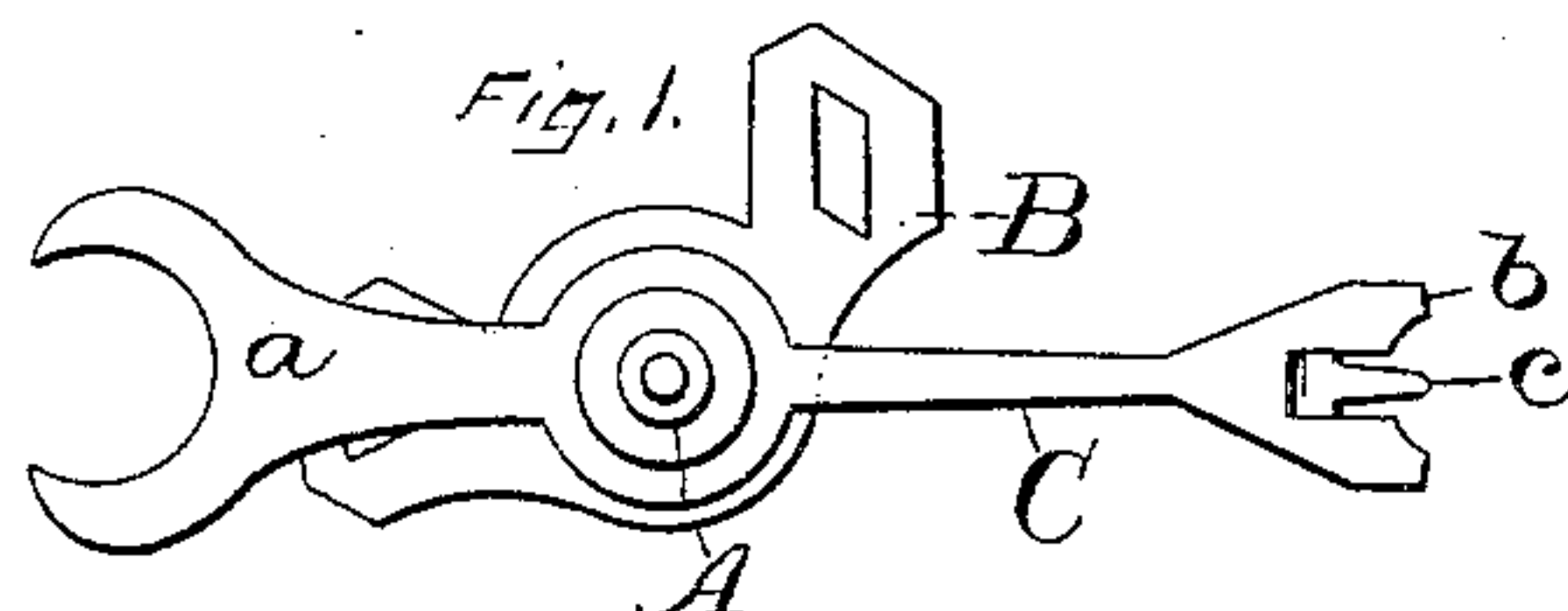
(No Model.)

A. M. LANE.

ESCAPEMENT LEVER FOR TIME PIECES.

No. 348,980.

Patented Sept. 14, 1886.



Witnesses
John Edwards Jr.
C. W. Keller

Inventor,
Almeron M. Lane.
By James Shepard
Atty.

UNITED STATES PATENT OFFICE.

ALMERON M. LANE, OF MERIDEN, CONNECTICUT.

ESCAPEMENT-LEVER FOR TIME-PIECES.

SPECIFICATION forming part of Letters Patent No. 348,980, dated September 14, 1886.

Application filed February 6, 1886. Serial No. 190,978. (No model.)

To all whom it may concern:

Be it known that I, ALMERON M. LANE, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Escapement-Levers, of which the following is a specification.

My invention relates to improvements in escapement-levers for marine clocks; and the objects of my improvement are to lessen the cost of production and to produce a lever which shall be very durable and accurate.

In the accompanying drawings, Figure 1 is an elevation of my lever, together with the verge and the shaft upon which they are mounted. Fig. 2 is a side elevation of the same, and Fig. 3 is a plan view of the blank from which my said lever is formed. All of said figures are on an enlarged scale.

A designates the shaft, B the verge, and C the escapement-lever. As in prior clocks, this lever is provided with a poise at one end and at the other end with a fork having a central slot and a guard-pin for operation, respectively, in connection with the pin and crescent of the balance-wheel.

Heretofore the guard-pin in levers of this class has been made of a separate piece and secured to the lever by screws, rivets, and analogous fastenings, and oftentimes of wire bent up and secured by one end to the lever within the hole made to receive it. This pin has generally been secured by both riveting and soldering one end to the lever; but sometimes the soldering has been omitted. Such a construction is not only expensive, but considerable labor is required after the lever is made to bring the guard-pin to the exact length required, and even when fitted it is very liable to become loosened, so as not to operate properly.

In my lever the end which serves as a poise I have marked *a*, the fork having the central

slot is marked *b*, and the guard-pin is marked *c*. I first blank out the lever C in the form shown in Fig. 3, without any proper slot in the end which is to form the fork; but I form at the middle of this end the guard-pin *c*, which, however, projects longitudinally beyond the end of the rest of the blank. This blank is then placed in a combined cutting and swaging die, which acts to simultaneously cut the blank on the parallel broken lines shown in Fig. 3 and bend or swage the metal so cut into the form represented in Figs. 1 and 2, thereby offsetting the body of the guard-pin *c* from the slot of the fork and bringing the outer portion of said pin into a plane at one side of the longitudinal plane of the lever C, and drawing its end inward into proper working position, which, in the particular construction shown, is in the same transverse plane as that of the end of the fork. By this construction I save the expense of drilling the lever and of riveting and soldering the guard-pin therein. The construction is not only more economical at first, but the construction is so accurate that no fitting is required, and the guard pin or point is so rigid as to be very durable, and not likely to be accidentally displaced.

The verge herein shown is made the subject of another application of even date herewith.

I claim as my invention—

The herein-described escapement-lever, having the guard-pin *c*, whose body is offset from the slot of the fork, said fork, guard-pin, and body of the lever all being formed of one piece of sheet metal the thickness of which is substantially represented in the finished lever, substantially as described, and for the purpose specified.

ALMERON M. LANE.

Witnesses:

JAMES SHEPARD,
JOHN EDWARDS, Jr.