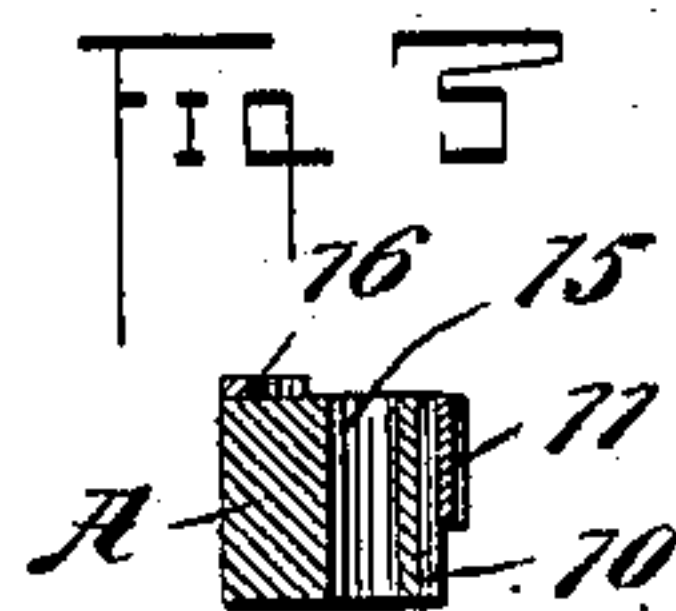
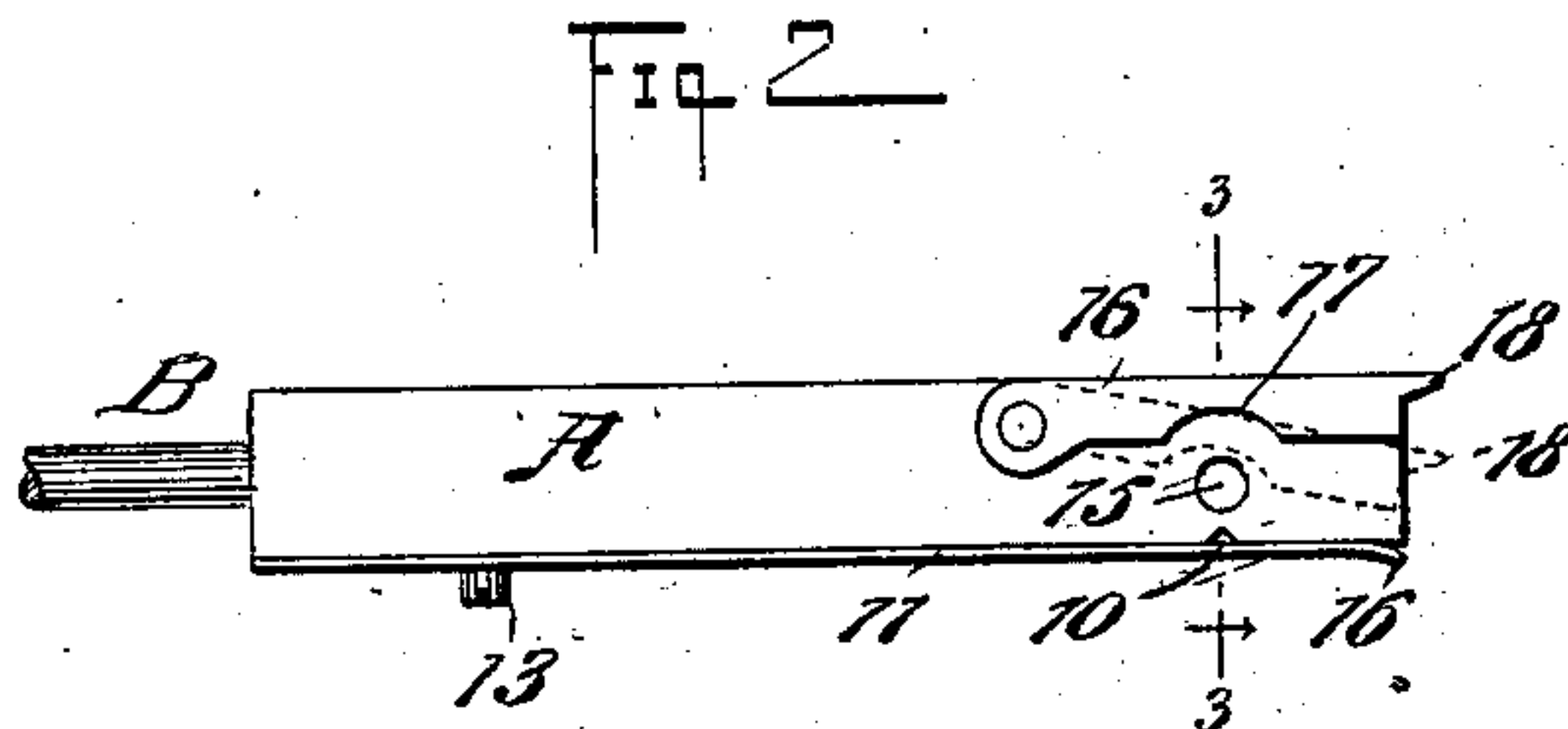
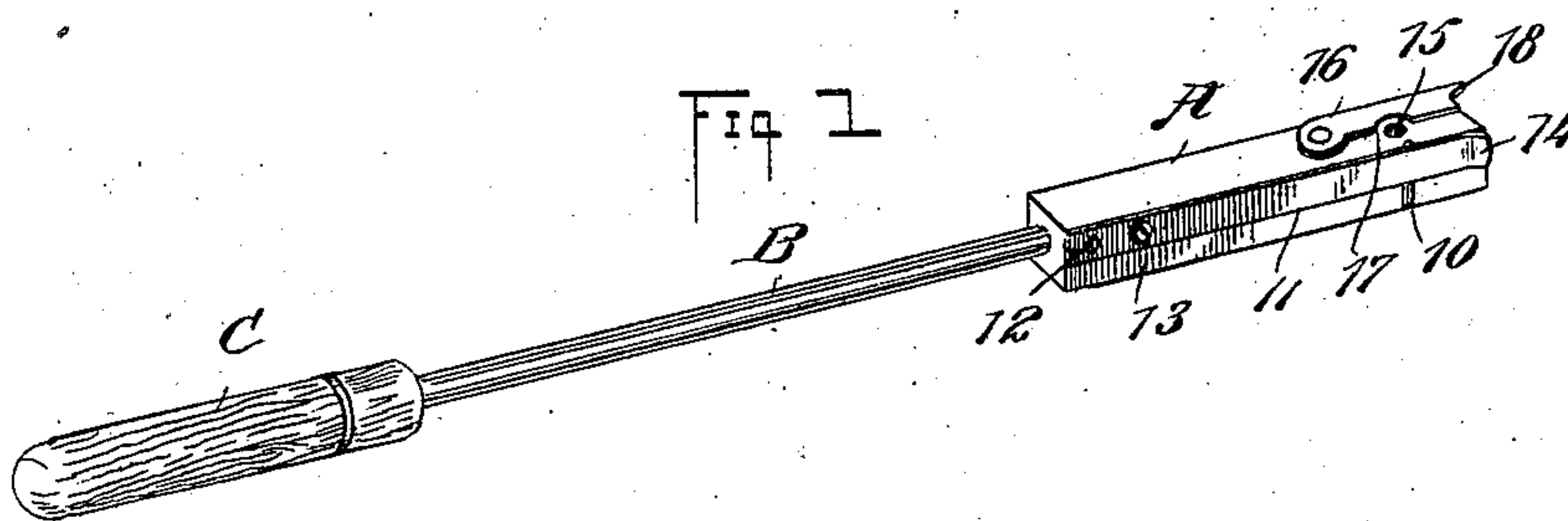


No. 692,622.

Patented Feb. 4, 1902.

S. W. CHRISTINE.
WATCHMAKER'S TOOL,
(Application filed Apr. 4, 1901.)

(No Model.)



WITNESSES:
John A. ...
John A. ...

INVENTOR
Samuel W. Christine
BY *Munroe*
ATTORNEYS

UNITED STATES PATENT OFFICE.

SAMUEL WINTER CHRISTINE, OF WASHINGTON, NEW JERSEY.

WATCHMAKER'S TOOL.

SPECIFICATION forming part of Letters Patent No. 692,622, dated February 4, 1902.

Application filed April 4, 1901. Serial No. 54,291. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL WINTER CHRISTINE, a citizen of the United States, and a resident of Washington, in the county of Warren and State of New Jersey, have invented a new and Improved Watchmaker's Tool, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a tool especially adapted for use in setting roller-jewels in a watch-balance, said tool being so constructed that the jewel may be held in position for setting and the balance held through the medium of its staff on the tool adjacent to the jewel, the tool being further provided with a locking device for the balance having a member prepared to remove or punch out old jewels.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improved tool. Fig. 2 is a plan view of the body portion of the tool, drawn on an enlarged scale; and Fig. 3 is a transverse section taken practically on the line 3 3 of Fig. 2.

The body A of the tool is in the form of a block of metal, which is usually rectangular, but of greater length than width.

B represents the shank for the body, and C the handle, which is attached to the shank.

In one side of the body A, near its forward end, a vertical groove 10 is produced extending from the top to the bottom. This groove is preferably V-shaped and is adapted to receive the jewel to be set, and the jewel is held temporarily in the said groove 10 by a spring 11, which crosses the groove 10. The rear or inner end of this spring is secured by a rivet or its equivalent to the side of the body A, and said spring is made to bear to a greater or less extent on the jewel by operating a tension-screw 13, which is passed through the spring and into the body. The outer end of the spring is provided with an outwardly-curved section 14, although this section may be omitted, if desired.

An opening 15 is made in the body, extending through from the top to the bottom, and this opening 15 is adapted to receive the balance-staff of the balance-wheel. Adjacent to this opening 15 a latch 16 is pivoted upon the top portion of the body, the said latch having a semicircular recess 17 produced in its inner edge opposite the opening 15, so that the latch may be carried to an engagement with the balance-staff placed in the opening 15, the recessed portion of the latch engaging with said staff, and at the outer end of the latch 16 a point or spur 18 is formed, which point or spur is adapted for punching out old jewels.

Preferably in the construction of the tool the opening 15 which receives the staff of a balance-wheel is opposite to or in transverse alinement with the groove 10, which serves as a seat for the jewel.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A watchmaker's tool, comprising a block having a vertical groove in one side edge, and provided with a handle projecting from one end, and a spring-plate secured at one end to the block and extending across the said groove, as set forth.

2. A watchmaker's tool comprising a block having an attached handle, said block being provided in one side edge with a seat for a jewel, in the form of a groove in one side, a plate-spring secured at one end to the block and extending across the said groove, and a tension device for the said spring, as described.

3. In a watchmaker's tool, a body provided with a handle, the said body being provided with an opening adapted to receive the staff of a balance-wheel, the body being further provided with a recess in one side opposite the said opening, the said recess being adapted as a seat for a jewel, a spring extending across the said recess, a regulating device for the spring, and a latch pivoted upon the body adjacent to the opening therein, which latch extends to the outer end of said body and terminates in a point adapted for punching out old jewels, as set forth.

4. In a watchmaker's tool, the combination with a body provided with an opening to re-

ceive the staff of a balance-wheel, and with
a jewel-seat, and a retaining device for hold-
ing a jewel in said seat, of a latch pivoted to
the body adjacent to the opening therein,
5 said latch having a recess in one edge and a
point or spur at its end, as and for the pur-
pose set forth.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

SAMUEL WINTER CHRISTINE.

Witnesses:

CHARLES B. CYPHERS,
JACOB W. VAN DOREN.