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PATENTED MAY 28, 1907.

J. W. GOUCHER.
ROLLER AND COLLET RESETTER TOOL FOR WATCHMAKERS' USE.
APPLICATION FILED OCT. 24, 1906.

Fig. 1.

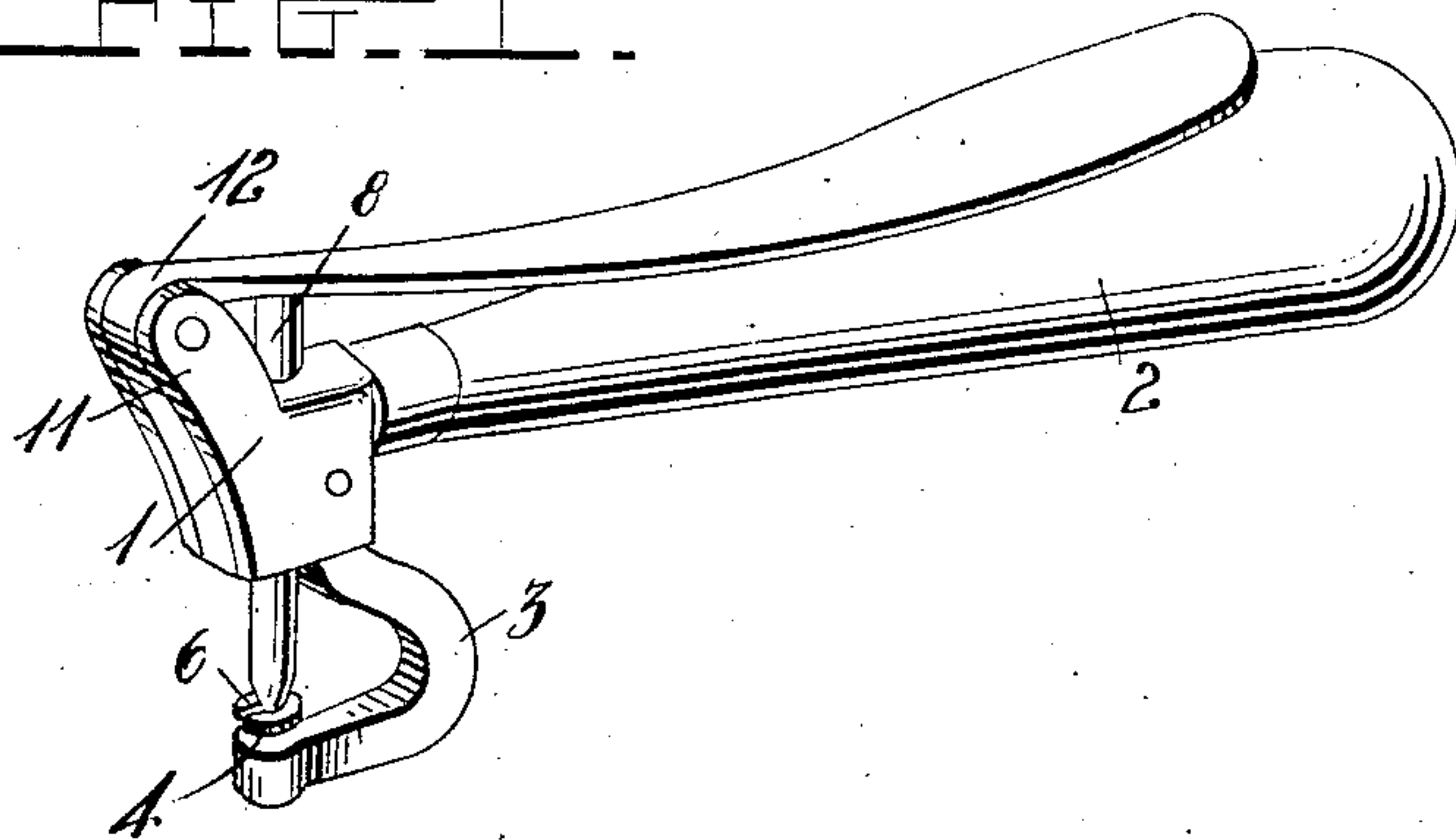


Fig. 2.

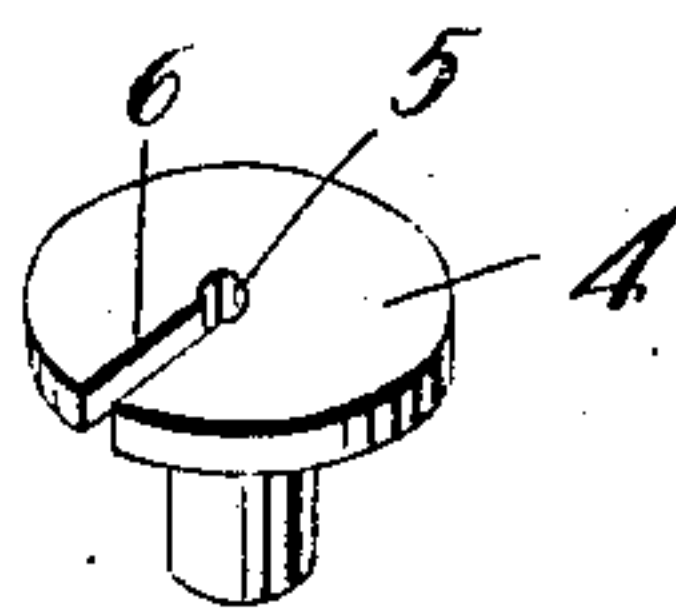
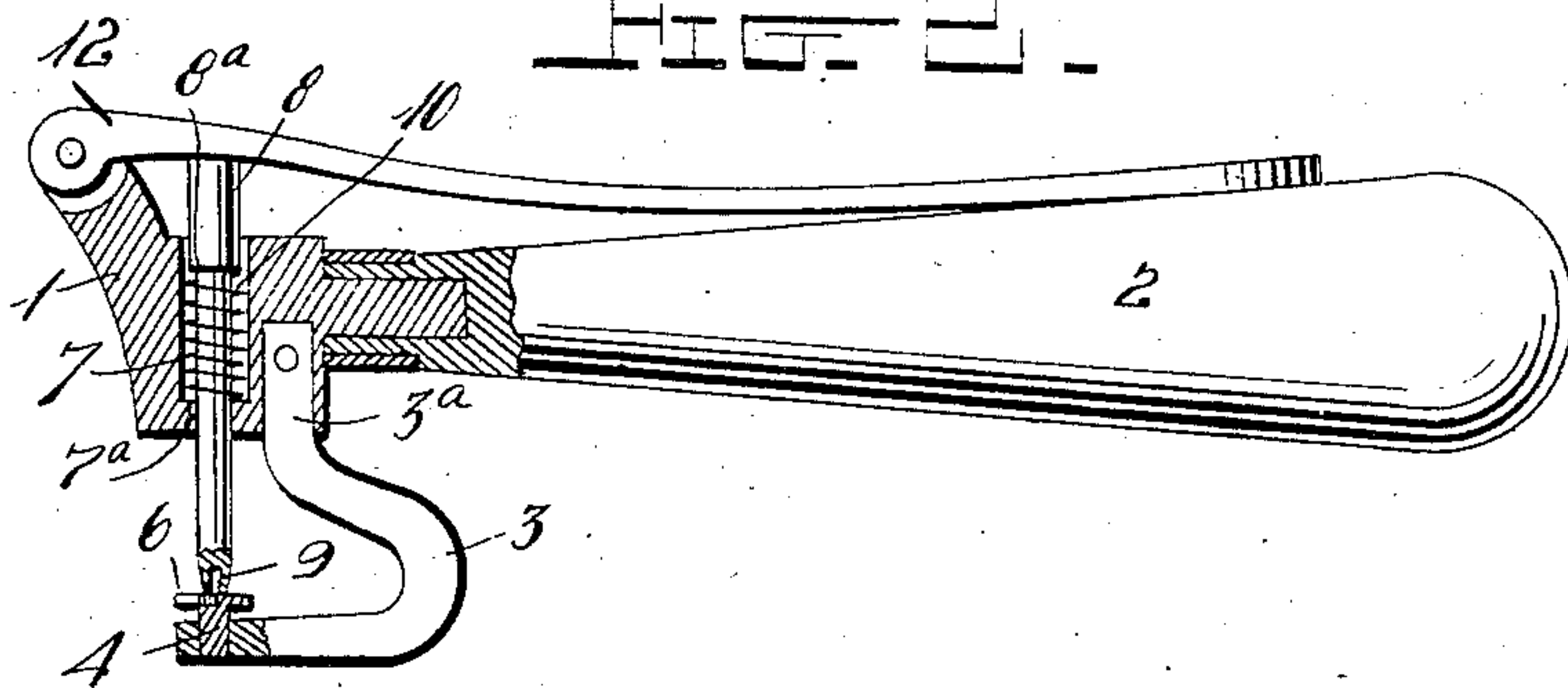


Fig. 3.

Witnesses

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JOSEPH W. GOUCHER, OF STITES, IDAHO.

ROLLER AND COLLET RESETTER TOOL FOR WATCHMAKERS' USE.

No. 854,732.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed October 24, 1906. Serial No. 340,388.

To all whom it may concern:

Be it known that I, JOSEPH W. GOUCHER, a citizen of the United States, residing at Stites, in the county of Idaho and State of Idaho, have invented certain new and useful Improvements in Roller and Collet Resetter Tools for Watchmakers' Use, of which the following is a specification.

This invention contemplates certain new and useful improvements in watch-makers' tools and more particularly to a tool for resetting rollers, collets, and balance shafts in the operation of manufacturing or repairing watches, and the object of the invention is to provide a simple and durable construction of tool of this character, which may be easily manufactured and which will be efficient in operation for the purposes desired.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of my improved tool; Fig. 2 is a side elevation thereof, partially in section; and, Fig. 3 is a detail perspective view of the disk employed.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates the head of the tool, and 2 the handle thereof. An open U-shaped frame 3 is provided at one end with an angularly disposed arm 3^a received in and secured to the head, and said frame projects laterally from the head as shown, with its arms substantially parallel to the handle 2. The outer end of the frame 3 is provided with an opening in which the shank of a stud 4 is held, said stud facing inwardly toward the head and provided in its face with a socket 5 and a slot 6 radiating from the socket and constituting a seat. The socket 5 is intended to admit of the balance staff of a watch, and the slot 6 is designed to accommodate the roller jewel in setting or resetting jewels so as to preclude the possibility of injury to the jewel.

The head 1 is formed with a transverse bore 7 which extends entirely therethrough in alinement with the face of the stud 4. In this bore a plunger 8 is mounted to slide and said plunger is formed at one end with a socket 9 designed to coact with the socket 5

in holding balance staffs and the like. A spring 10 is coiled around the plunger and bears against shoulders 7^a and 8^a in the head and on the plunger, respectively, the tension of the spring being in a direction to force the plunger away from the stud 4. The rear end of this plunger projects out of the head as shown.

The head 1 is provided at its outer end with a fork extension 11 projecting in an opposite direction to the frame 3, and a lever 12 is fulcrumed at one end between the members of this extension upon a pintle, as shown.

In the practical operation of my improved watch-maker's tool, the lever is caused to bear against the rearwardly projecting end of the plunger to force the same through the head toward the seat constituted by the disk 4, to hold the balance staff or the like in the two sockets of the plunger and seat, respectively. It is to be noted that the lever 12, in operative position extends along the handle 2 and close to the same so that the workman may manipulate the lever with the same hand which grasps the handle 2, leaving the other hand free for proper manipulation of the balance staff, or roller, or collet, as the case may be. It is also to be noted that the lever 12 is fulcrumed at its end at a point in advance of and completely without the margin of the transverse bore 7 of the head 1, and that the said lever merely presses upon the outer end of the plunger 8 and is not permanently connected thereto. Hence, it is evident that the lever may be swung outwardly and forwardly away from the handle 2 so as to expose the plunger 8 and thereby permit of the insertion of the plunger in its place or the removal thereof, without ever disconnecting the lever from the fork extension 11 in which it is fulcrumed.

From the foregoing description in connection with the accompanying drawings, it will be seen that I have provided a very simple and handy tool for watch-makers' use, which will be durable in construction and efficient in operation for the desired use.

The curved shape of the frame 3 provides a space for a watch balance, in setting or resetting rollers, collets, and balance staffs of watches.

Having thus described the invention, what is claimed as new is:

A tool of the character described, comprising a head and a handle, a frame secured to the head and provided with a seat facing the

head, the said head being provided with a
bore in alinement with said seat, a plunger
mounted in said bore and spring pressed
away from the seat, the rear end of the plun-
5 ger projecting out of the head, and a lever
fulcrumed on the head, at a point in advance
of and lying wholly without the margin of the
bore of the head and adapted to extend rear-
wardly from its fulcrum point over the rear
10 end of the plunger and designed for engage-

ment therewith whereby to press the plunger
toward the seat, as and for the purpose set
forth.

In testimony whereof I affix my signature
in presence of two witnesses.

JOSEPH W. GOUCHER. [L. s.]

Witnesses:

NELLIE GELBACH,
E. M. CLARK.