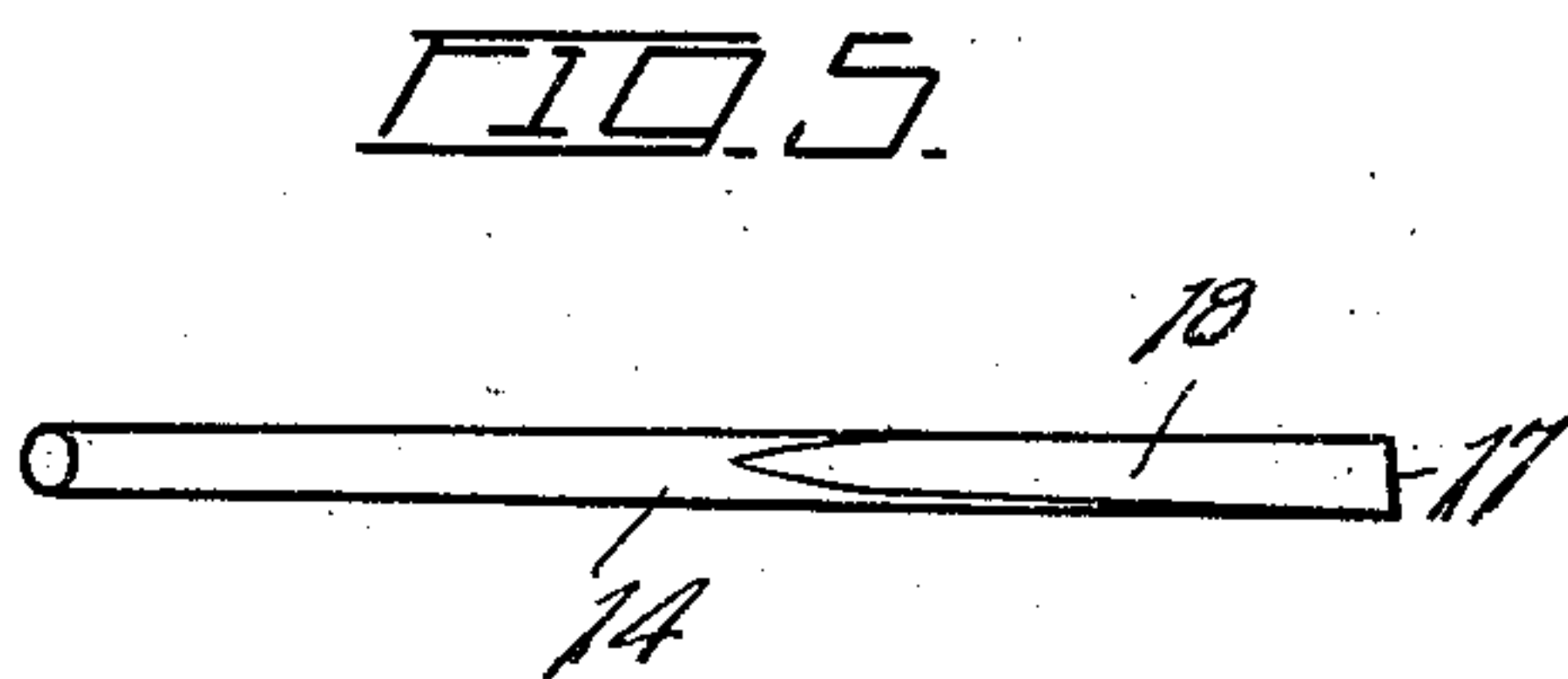
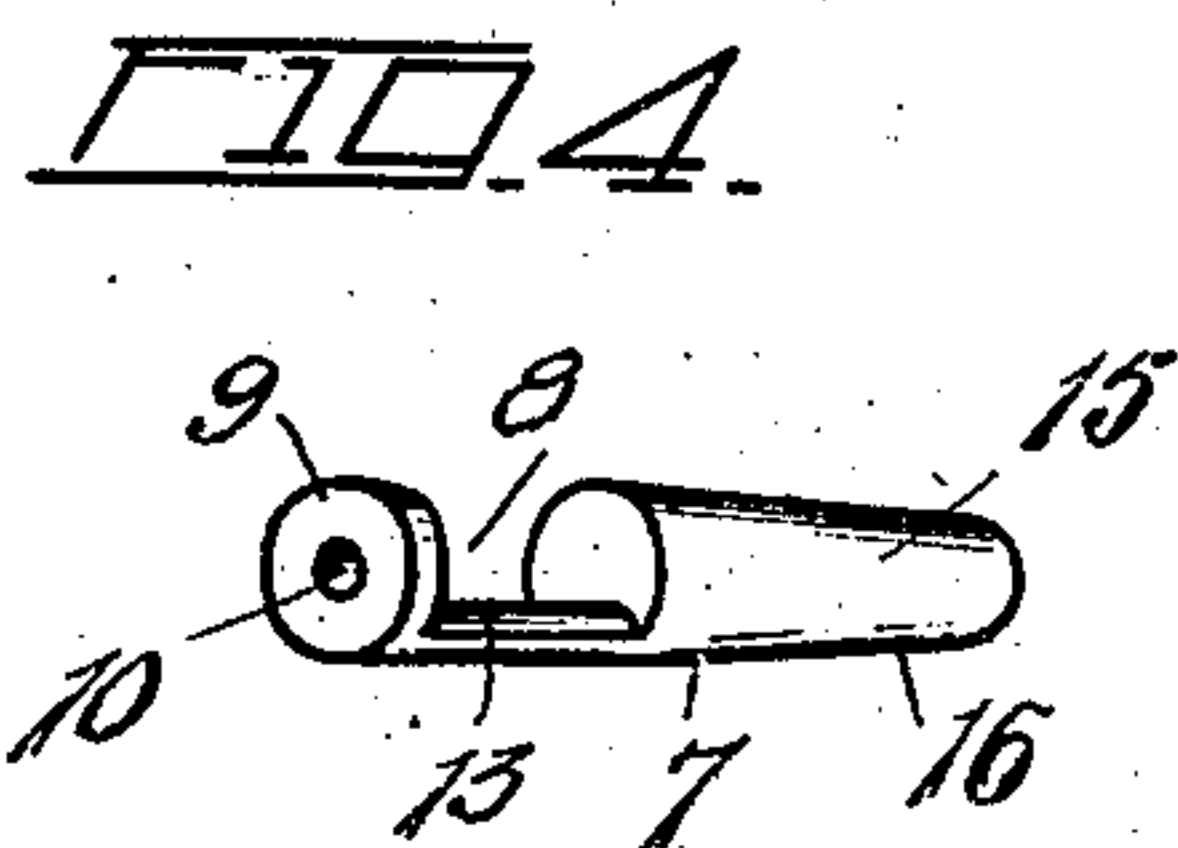
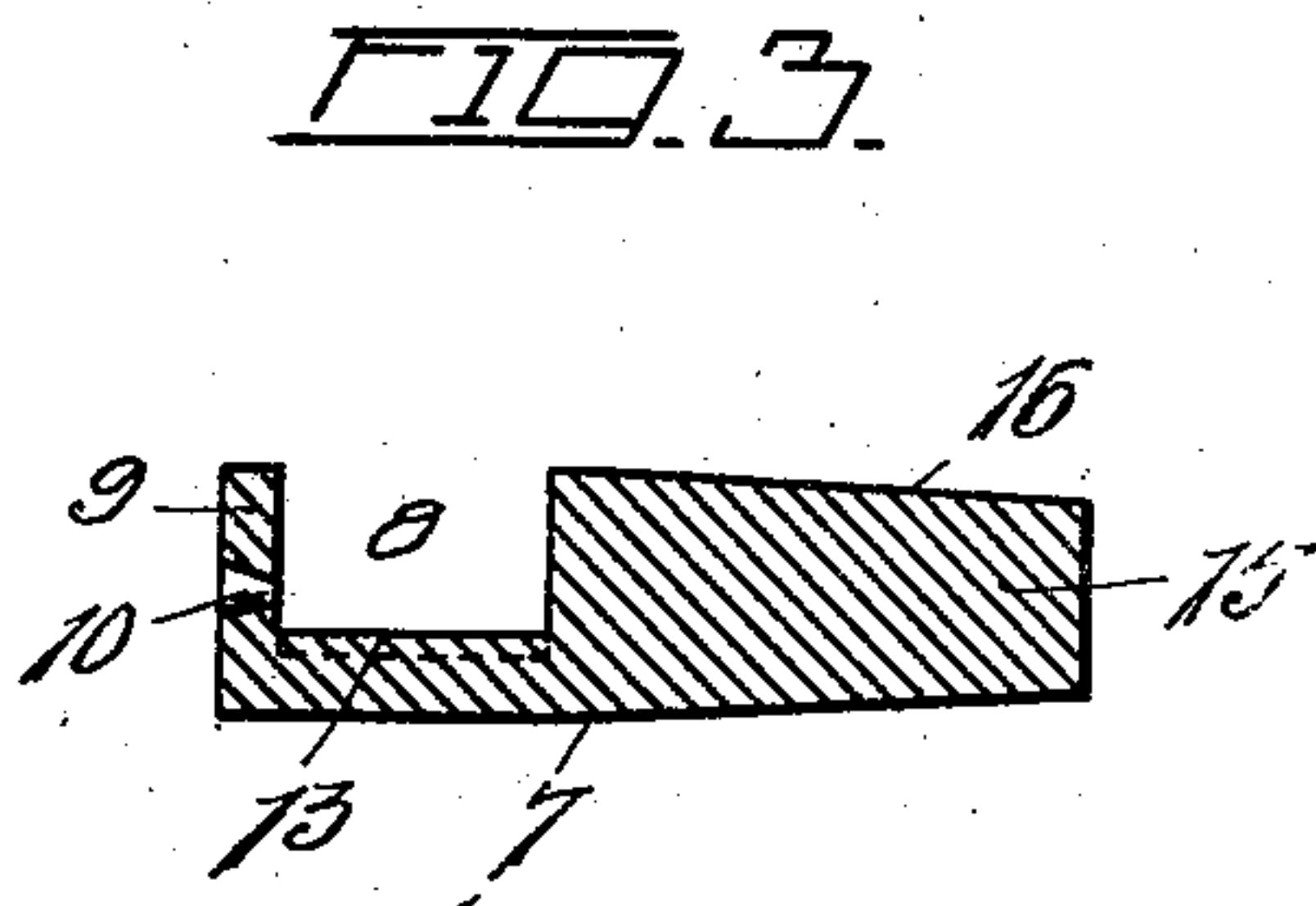
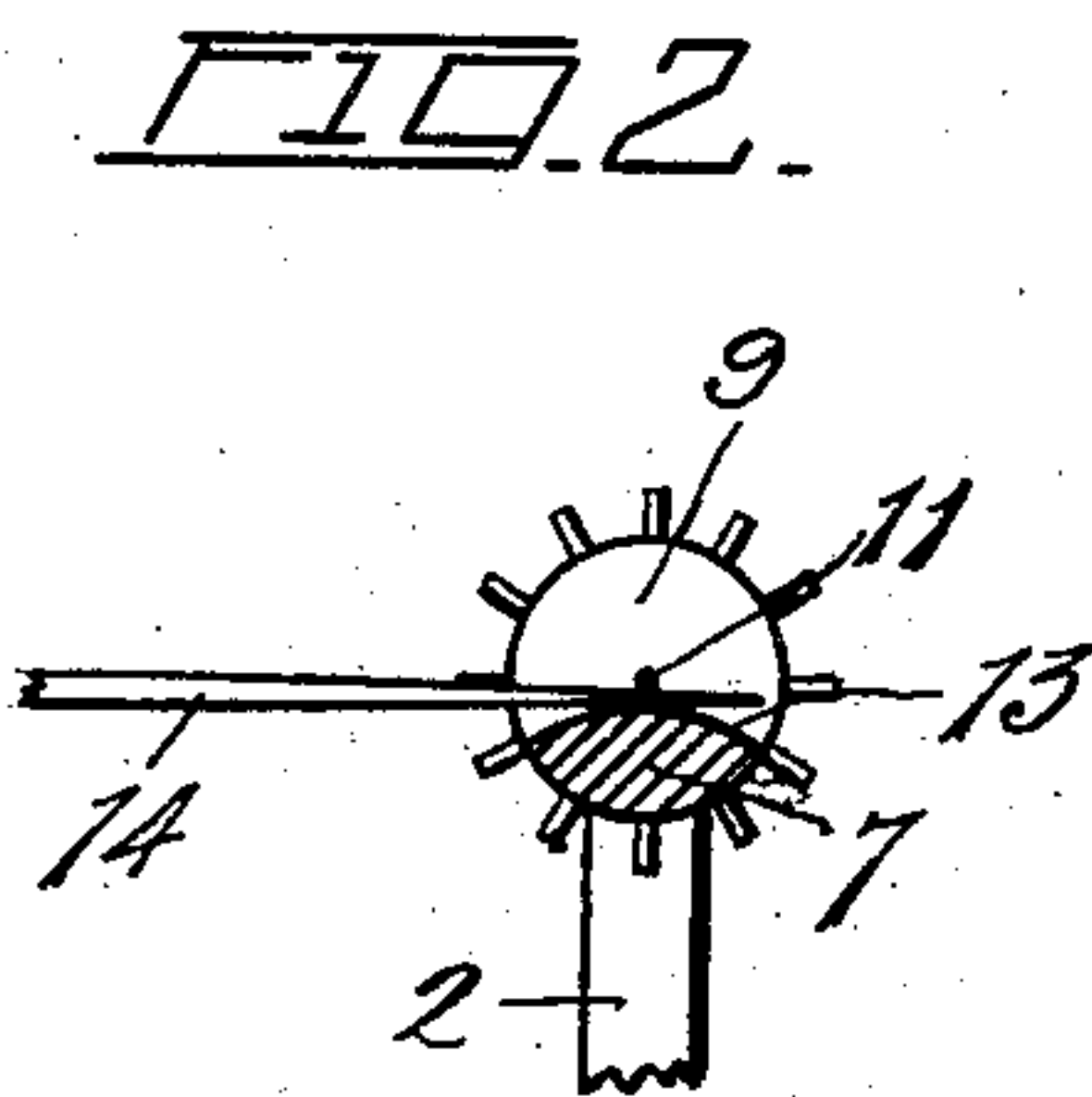
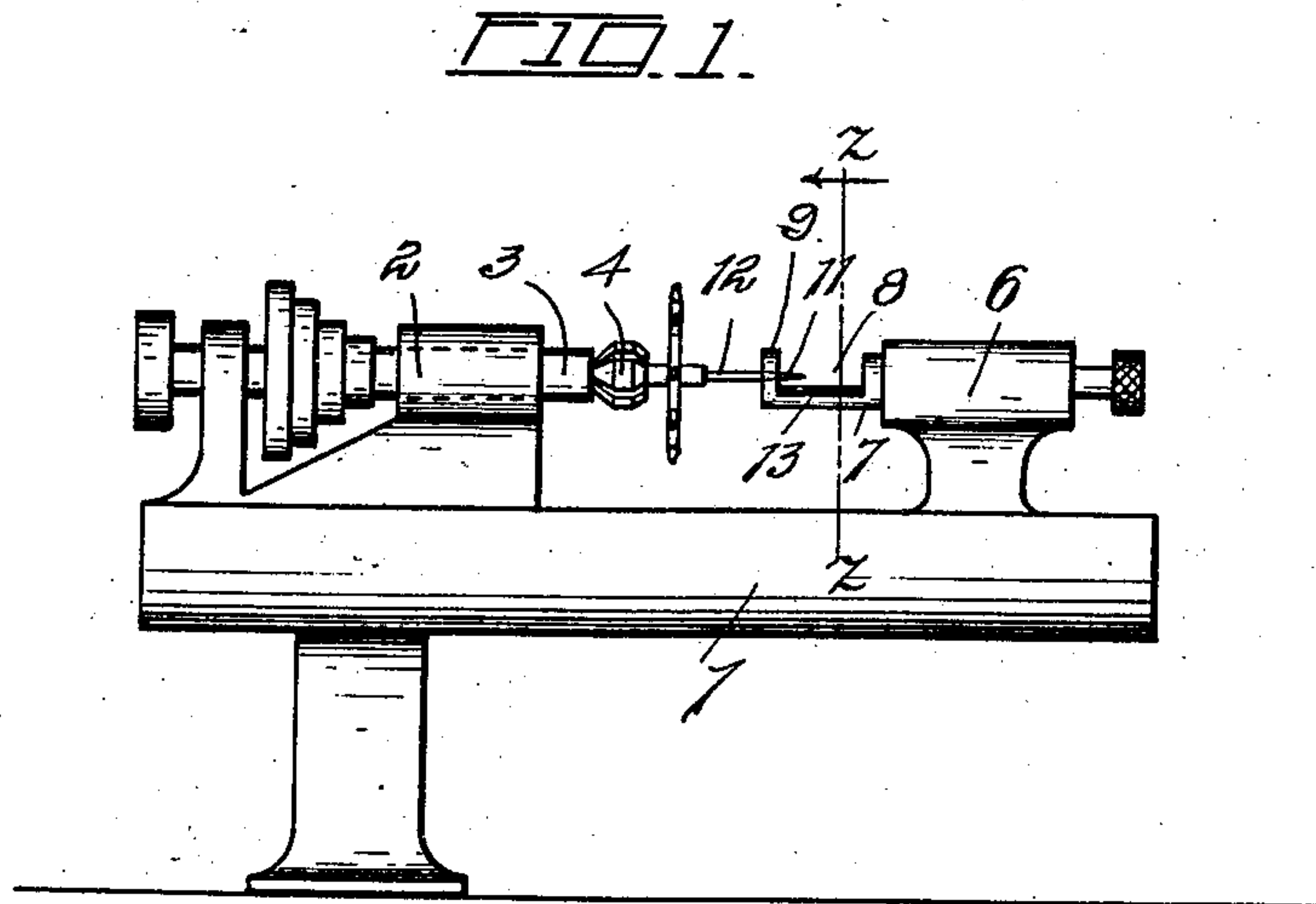


D. L. DAVIES.
BALANCE STAFF PIVOT TRUING DEVICE.
APPLICATION FILED JULY 1, 1907.

934,429.

Patented Sept. 21, 1909.



Witnesses:

Helena V. Reap.
Catharine J. Crenshaw.

Inventor:

Dennis L. Davies.

By

F. J. Raymond & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

DENNIS L. DAVIES, OF NELSON, NEBRASKA.

BALANCE-STAFF-PIVOT-TRUING DEVICE.

934,429.

Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed July 1, 1907. Serial No. 381,789.

To all whom it may concern:

Be it known that I, DENNIS L. DAVIES, a citizen of the United States, residing at Nelson, in the county of Nuckolls and State of Nebraska, have invented a new and useful Balance-Staff-Pivot-Truing Device for Jewelers' Lathes, of which the following is a specification.

This invention relates to watchmakers' tools and especially for a device for truing the bent pivot of a balance staff of a watch, and has for its object to provide a simple, inexpensive and efficient device capable of receiving the bent pivot of a balance staff which is to be straightened.

The invention consists in the novel features of construction which hereinafter are fully described in the course of the following specification with reference to the accompanying drawings and more particularly pointed out and distinctly defined in the claims hereto appended.

Referring to the accompanying drawings forming a part of this specification wherein like characters of reference denote similar parts throughout the several views: Figure 1, is a side elevation of a jeweler's lathe having my invention applied thereto. Fig. 2, is a vertical sectional view on line $x-x$ of Fig. 1, looking in direction of the arrow and clearly showing the steel taper as in actual use in straightening the bent pivot of a balance staff. Fig. 3, is a central sectional view of the truing device. Fig. 4 is a perspective view of the truing device. Fig. 5 is a perspective view of the steel taper used in connection with the truing device.

Referring to the accompanying drawings 1, designates the bed of a jeweler's lathe, 2, head-stock provided with the spindle 3, in the end of which is held a wire chuck 4. The lathe is also provided with the tail-stock spindle 6, which in turn receives and firmly holds the truing device in a stationary position.

The truing device 7, which is turned from a piece of steel or other suitable material has a cut-away top portion 8, and a projecting front or head 9, circular in form and which is provided at its center with the conical opening 10, adapted to receive the pivot 11,

of a balance staff 12, as clearly shown in Fig. 1. The bed 13, of the truing device 7, it will be observed is convexed as shown and the highest surface of the bed is far enough below the opening 10, to allow the insertion of the steel taper 14, between the pivot 10, and convexed bed 13, as clearly shown in Fig. 2. By gradually crowding the steel taper 14, forward it will be readily seen that when the balance staff is revolving the bent pivot thereof will be gradually trued. As the bed 13, of the truing device 7, is convexed in cross section the steel taper 14, will always have a solid rest whether crowded slightly upward, downward or straight forward.

In operation the balance staff is firmly held in place by means of the revolving wire chuck 4, clearly shown in Fig. 1. A cylindrical end 15, of the truing device 7, is slightly tapered as shown at 16, to allow it to be easily inserted and removed from the tail-stock spindle 6.

It will be observed that the steel taper 14, has its one end gradually tapering to an edge 17, thus forming a pair of flat faces or converging sides 18.

Having thus fully described my invention, what I claim is:

1. A truing device having a cut away top portion to form a resting plate for the flat end of a steel taper and a projecting front having a conical opening therein adapted to receive the bent pivot of a balance staff for truing the same.

2. A truing device having a cut-away top portion to form a bed or resting plate, and a projecting front provided with a conical opening to receive the pivot of a balance staff.

3. A truing device having a cut-away top portion to form a convexed bed or resting plate and a circular projecting front provided with a conical opening to receive the bent pivot of a balance staff to be trued.

4. The combination in a jeweler's lathe, of a head-stock, a spindle, and a work holding chuck in said spindle, of a tail-stock head and a tail-stock spindle mounted therein, a truing device having a cut-away top portion to form a bed having a convex upper sur-

face and a projecting front which is provided with a conical opening to receive the pivot and shoulder of a balance staff carried by the aforesaid work holding chuck and a
5 steel taper adapted to be inserted between the pivot and convex surface of the bed formed by said cut-away top portion of the truing device for truing said pivot.

In testimony whereof I have signed my name to the specification in the presence of 10 two subscribing witnesses.

DENNIS L. DAVIES.

Witnesses:

J. G. RICHMOND,
EDW. E. CLARK.