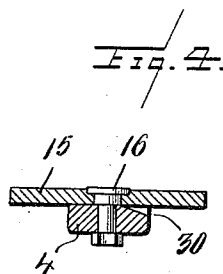
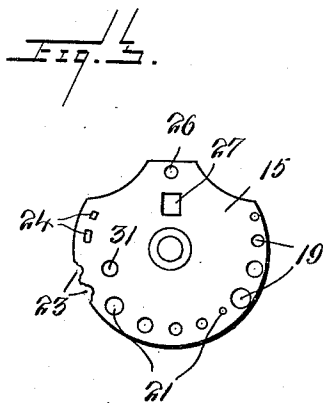
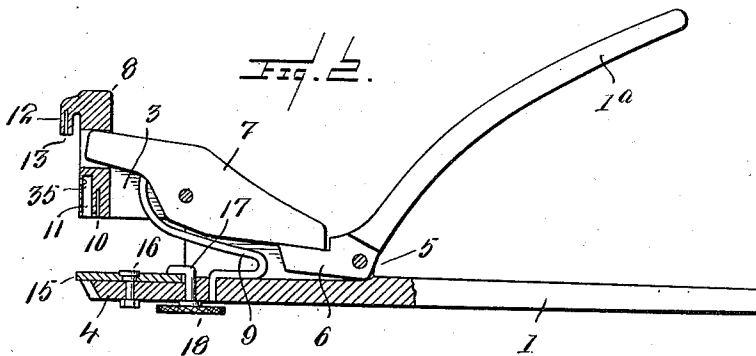
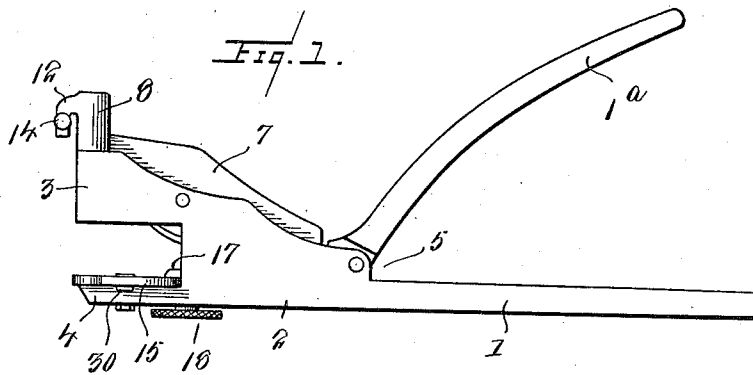


J. H. WEISMANN.
WATCHMAKER'S TOOL.
APPLICATION FILED JULY 22, 1911.

1,024,383.

Patented Apr. 23, 1912.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 5.

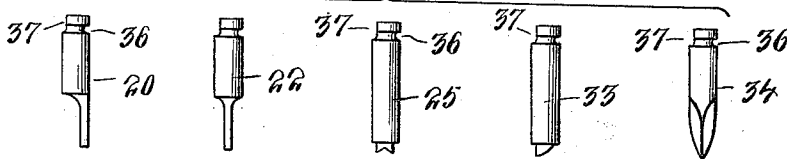


Fig. 10.

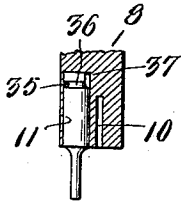


Fig. 6.

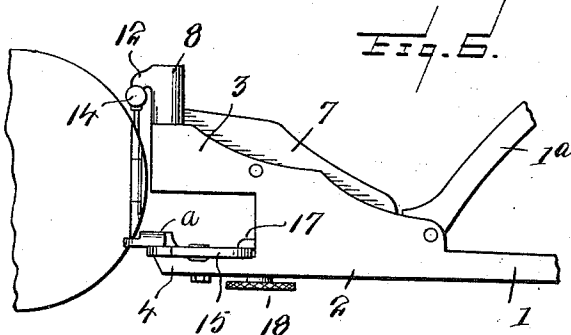


Fig. 7.

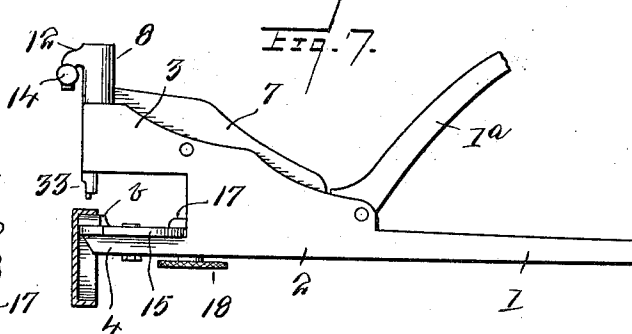


Fig. 11.

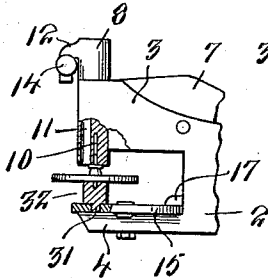


Fig. 8.

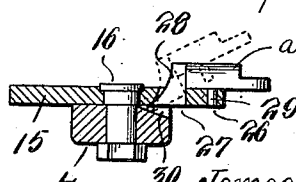


Fig. 9.



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UNITED STATES PATENT OFFICE.

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WATCHMAKER'S TOOL.

1,024,383.

Specification of Letters Patent.

Patented Apr. 23, 1912.

Application filed July 22, 1911. Serial No. 639,945.

To all whom it may concern:

Be it known that I, JAMES H. WEISMANN, a citizen of the United States, residing at Stillwater, in the county of Payne and State of Oklahoma, have invented new and useful Improvements in Watchmakers' Tools, of which the following is a specification.

This invention provides a tool designed most especially for watch makers and jewelers and has for its object to provide an implement which embodies in its organization a variety of tools each adapted for a particular work, thereby making it possible to materially diminish the number of individual tools required by the craft and at the same time reducing the initial cost of equipment, since the tool embodies a stone setter, a staking tool, a main spring punch, a barrel hook punch, a watch case joint pin remover, a pin tongue rivet remover and a roller table replacer.

The invention consists of the novel features, details of construction and combination of parts, which hereinafter will be more particularly set forth, illustrated in the accompanying drawings, and pointed out in the appended claims.

Referring to the drawings, forming a part of the specification, Figure 1 is a side view of a watch maker's tool embodying the invention. Fig. 2 is a view similar to Fig. 1 having the head, plunger and table in section. Fig. 3 is a top plan view of the table. Fig. 4 is a transverse section of the table and its support. Fig. 5 shows a variety of punches. Fig. 6 is a side view of the bed piece applied to the tool when adapting the same for a watch case joint pin remover. Fig. 7 is a detail view of the bed piece adapting the tool for use as a barrel hook punch. Fig. 8 is a detail view of the bed piece to be fitted to the table of the tool when the latter is adapted for use as a stone setter. Fig. 9 is a sectional view, showing the manner of applying the bed pieces shown in Figs. 6 and 7. Fig. 10 is a sectional view of the plunger, showing more clearly the manner of fastening the punches thereto. Fig. 11 is a detail view, showing the tool adapted for pressing the roller table on the balance staff.

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.

The tool comprises two members, the one being relatively stationary and the other movable. The stationary member consists of a handle 1 and a head 2, the latter having an opening in its outer end to receive the working parts, the part 3 above the opening forming a guide and the part 4 below the opening constituting a support. The movable member 1^a is pivoted to the rear portion of the head at 5 and has a forwardly extending toe 6. A lever 7 is located in an opening formed in the upper side of the head 2 and is pivoted to the head midway of its ends. The rear end of the lever 7 extends over the toe 6. The front end of the lever 7 engages a plunger 8 which is mounted in a vertical opening formed in the guide 3. A spring 9 normally holds the plunger 8 and the forward end of the lever 7 elevated. The plunger 8 has a central opening 10 and an opening 11 in front of the opening 10 and extremely close to the front side of the plunger. The opening 11 is intended to receive any one of a plurality of punches, such as indicated in Fig. 5. The central opening 10 is intended to receive the pivot of a balance staff when removing the roller table. An arm 12 extends from the upper end of the plunger 8 and is substantially of L form. The vertical member of the arm 12 has a small opening 13 to receive the punches used for removing the watch case joint pin. A set screw 14 is threaded into a side of the vertical member of the arm 12 and engages the punch inserted in the opening 13 to retain the same in place.

The table 15 is approximately of circular form and is mounted upon the support 4 and pivotally connected thereto by means of a fastening 16, which consists of a shouldered stud and nut, said stud being secured in an opening formed in the support 4 and having the table 15 rotatable thereon, said table being secured in the adjusted position by means of a hook bolt 17 and thumb nut 18. The hook bolt 17 fits loosely in an opening formed in the support 4 and its hook end engages over the rear portion of the table 15 and is caused to grip the same when the thumb nut 18 is tightened. The table 15 is provided with a plurality of openings adapted to cooperate with different punches, as illustrated in Fig. 5, and with bed pieces, as shown in Figs. 6, 7 and 8. A series of openings 19 are formed close to the edge of

the table 15 for use in connection with punches 20, such as illustrated in Fig. 5, thereby adapting the tool for removing pin tongue rivets, particularly where said rivets are close to the surface of the article as in some styles of brooches or articles of jewelry having catch pins. The table has also a series of openings 21 set in from the outer edge so as to operate with center punches 22, as indicated in Fig. 5. Other openings 23 are formed in the edge portion of the table and extend through the outer edge thereof, thereby enabling pivots set close to a surface or partly concealed to be removed. Rectangular openings 24 are formed in an edge portion of the table for conjoint use with punches of the type shown at 25 in Fig. 5, whereby the tool may be used for punching watch main springs. Openings 26 and 27 are formed in the table to receive the bed pieces shown in Figs. 6 and 7, the opening 27 being of rectangular form to receive the table end 28 of the bed pieces and the opening 26 being adapted to receive a pin 29. The under side of the table is cut-away adjacent the opening 27 to receive the tapered extremity of the projection 28, said tapered end being confined between the table and the support 4. When placing bed pieces of the form shown in Figs. 6 and 7 in position the table is turned to bring the openings 26 and 27 at one side of the support 4, said support having a cutaway portion 30 to receive the tapered extremity of the bed piece when placing the same in position or removing it from the table. After the bed piece has been placed in position the table is turned to bring the bed piece at the front of the tool, the bed piece being retained in place by the tapered extremity of the projecting portion 28 which is confined between the table 15 and the support 4 substantially in the manner as clearly shown in Fig. 9. An opening 31 formed in the table receives the shank of the bed piece 32 which supports the lower end of the balance staff when the tool is used to remove the roller table. The bed piece *a* shown in Fig. 6 is intended to support a watch case joint when removing the pin therefrom. The bed piece *b*, Fig. 7, is used when the tool is adapted for punching a hook upon the main spring barrel. When the bed piece *b* is fitted to the table 15 a punch, such as indicated at 33 in Fig. 5, is fitted in the plunger 8. For setting jewels a punch 34, as shown in Fig. 5, is fitted in the plunger 8.

The several punches are retained in place by means of a pin 35 fitted in an opening formed transversely of the plunger 8 and intersecting the opening 11 thereof, said pin having a portion extending into the opening 11 so as to enter an annular groove 36 formed in the outer side of the punches near the upper end thereof. A side portion of

the punches is cut away, as indicated at 37, and extends from the annular groove 36 to the upper end of the punch to provide a clearance for the part of the pin 35 projecting into the opening 11, thereby admitting of the punches being placed in position or removed from the plunger. When placing a punch in position it is turned so that the flat side 37 is in line with the projecting portion of the pin 35 and after the punch has been moved to bring the annular groove 36 opposite the pin 35 the punch is turned, thereby causing the projecting part of the pin 35 to enter the annular groove 36 and hold the punch in place.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

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

1. A watch maker's tool comprising a relatively fixed member and an operating member pivoted to the fixed member and having a projecting portion, the fixed member embodying a head and a handle, the head having an opening forming a support and a guide and having an opening in its outer side, a lever pivotally mounted in the opening of the head and having its rear end engaging the projecting portion of the operating member, a plunger mounted in the guide portion of the head to operate across the opening thereof and engaged by the forward end of the lever, said plunger having openings in its lower end and provided near its upper end with an arm in which is formed a longitudinal opening to receive a pin removing punch.

2. In a tool of the character described, the combination of a support, a rotary table mounted upon the support and having two openings, said table having its under side cut away adjacent the inner opening, a bed piece having a tapered projection to enter the inner opening of the table and a pin to enter the outer opening of said table, and a plunger adapted to receive a punch for co-operation with the bed piece.

3. A watch maker's tool comprising a relatively fixed member, an operating member pivoted thereto, a fixed member comprising a head having an opening to form a guide and a support, a plunger mounted in said guide and having a projecting arm,

connecting means between the plunger and
operating member, a rotary table mounted
upon the support and having a plurality of
openings at different distances from the
5 outer edge thereof, two of the openings hav-
ing a radial arrangement and said table
having its under side cut away adjacent the
inner one of the said radially alined open-
ings, and a bed piece having a tapered pro-

jection to enter the said inner opening and 10
a pin to enter the outer opening.

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

JAMES H. WEISMANN.

Witnesses:

S. F. SWINFORD,
E. WILLIAMS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."