(Model.)

C. G. SCHELLENBERGER.

WATCH MAKER'S PLIER.

No. 273,612. Patented Mar. 6, 1883.

Fig. 1.

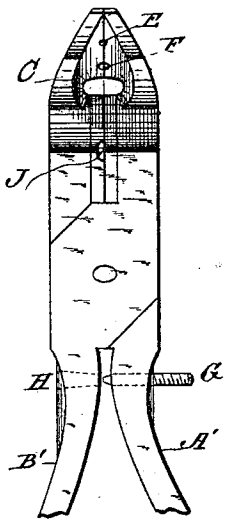


Fig. 2.

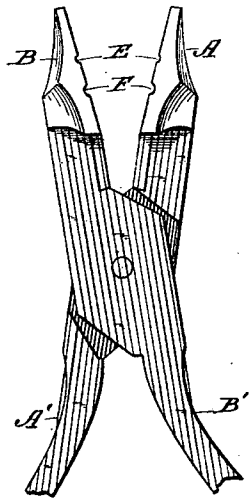


Fig. 3.

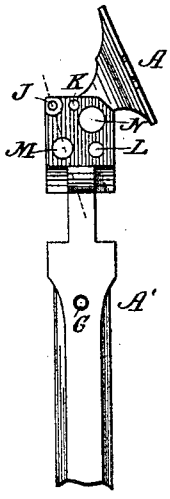


Fig. 4.

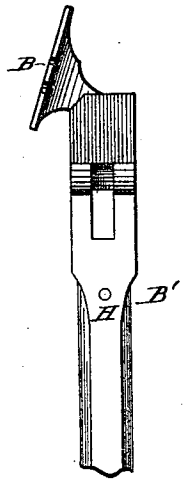
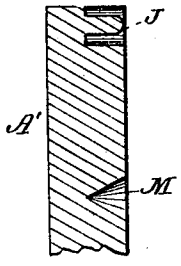


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES G. SCHELLENBERGER, OF TERRE HAUTE, INDIANA, ASSIGNOR TO HIMSELF, AND CONRAD GEIGER, OF STREATOR, ILLINOIS.

WATCH-MAKERS' PLIERS.

SPECIFICATION forming part of Letters Patent No. 273,612, dated March 6, 1883.

Application filed November 1, 1882. (Model.)

To all whom it may concern:

Be it known that I, CHARLES G. SCHELLENBERGER, of Terre Haute, in the county of Vigo and State of Indiana, have invented a new and Improved Watch-Makers' Pliers, of which the following is a full, clear, and exact description.

The object of my invention is to provide new and improved pliers which can be used to grasp hands, screws, &c., and to close the hands of different make.

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

Figure 1 of the drawings is an end view in perspective; Fig. 2, a side elevation; Figs. 3, 4, views showing the two parts of the pliers detached; Fig. 5, a detail sectional view.

Two jaws, A and B, are attached to the upper ends of the handle-levers A′ B′ of pliers, and are pivoted to each other in the usual manner, the said jaws being attached to the sides of the handle-levers in such a manner that they will be inclined to the planes of the said handle-levers and will be out of the plane of the said handle-levers; or, in other words, the jaws project laterally from the upper ends of the pliers, and are not parallel with the pliers, but slightly inclined to the same, as is shown in Figs. 3 and 4. The jaws A and B are each provided with a longitudinal groove, C, in the inner or adjoining edges, and the said edges are also provided with notches, forming a very small aperture, D, for holding second-hands, screws, &c., a larger aperture, E, for holding larger hands, and a still larger aperture, F, for holding larger parts of watches.

If a watch-hand is held by means of my improved pliers, the barrel of the hand is held in one of the apertures, D, E, or F, and the hand itself passes through the recess formed in the inner adjoining edges of the jaws by the grooves C.

The handle A′ is provided with an adjustable screw-punch, G, and the opposite handle, B′, is provided with a transverse aperture, H, for receiving the end of the punch. At the base of the jaw A a projecting punch, J, is provided, which is to be used for contracting minute-hands. The upper end of the handle-lever A′ is also provided with a concave second-hand-closing recess or contractor, K, and with the hour-hand-closing recesses or contractors L and M, which are of different sizes, and with an hour-hand-closing recess or contractor, N, for American hour-hands. Thus it will be seen that if the socket or recess of a hand is too small to go upon the shaft which is to rotate it it can be readily enlarged by a punch, J, of suitable size, by simply pressing the open end on the tapered end of the punch; or if the socket is too large it may be contracted to the proper size by pressing it into one of the tapered recesses or cavities, or the reverse.

The above-described device will be found to be of very great service in setting and adjusting watch-hands and in closing and contracting them.

The punch G is used for punching mainsprings.

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

1. Pliers provided with one or more tapering punches and recesses at the inside of the base of one of the jaws, whereby the jaws are adapted for the expansion or contraction of watch-hand sockets, as described.

2. In watch-makers' pliers, the combination, with the pivoted plier-handles A′ B′, of the jaws A B and the punch J, substantially as herein shown and described, and for the purpose set forth.

3. In watch-makers' pliers, the combination, with the pivoted plier-handles A′ B′, of the jaws A B, having one or more hand-closing recesses, K, L, M, and N, substantially as herein shown and described, and for the purpose set forth.

CHAS. G. SCHELLENBERGER.

Witnesses:
H. F. SCHMIDT,
CAL THOMAS.

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