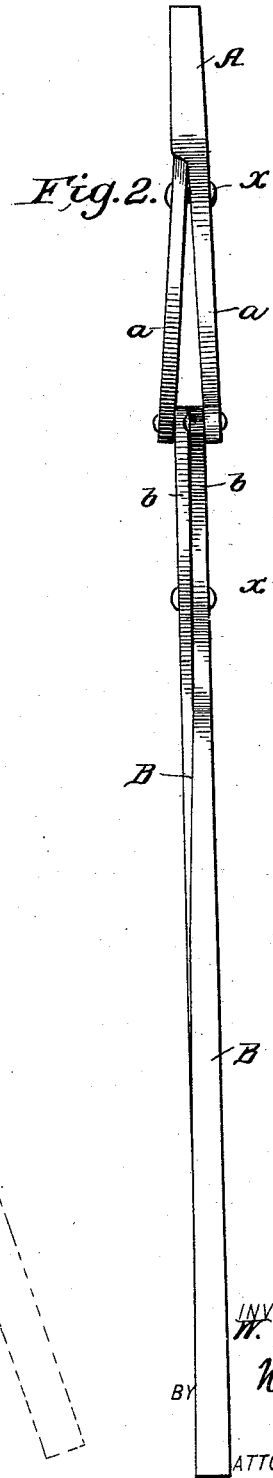
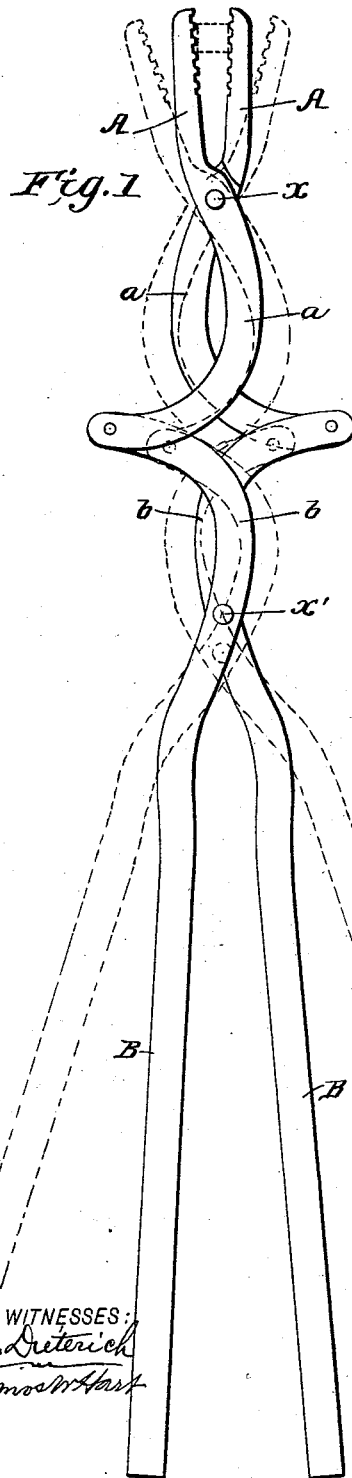


(No Model.)

W. J. MONTEITH.
PLIERS.

No. 456,049.

Patented July 14, 1891.



WITNESSES:
Fred F. Duerick
Amos Hart

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UNITED STATES PATENT OFFICE.

WALTER J. MONTEITH, OF ALBANY, OREGON.

PLIERS.

SPECIFICATION forming part of Letters Patent No. 456,049, dated July 14, 1891.

Application filed April 4, 1891. Serial No. 387,694. (No model.)

To all whom it may concern:

Be it known that I, WALTER J. MONTEITH, of Albany, in the county of Linn and State of Oregon, have invented a new and useful Improvement in Pliers, of which the following is a specification.

The object of my invention is to provide pliers or pinchers which have greater leverage and power of grip than those constructed in the usual way. To this end I operate the jaws by means of handle-levers, which are pivoted together, thus forming with the jaws a system of compound levers.

In accompanying drawings, Figure 1 is a plan view of my pliers closed, and Fig. 2 is a side or edge view of the same.

The jaws A are pivoted together in the usual way, and the rear ends of their longer shanks or arms *a* are curved inward in opposite directions, the shorter curved portions being approximately at a right angle to the longer and straight portion of said shoulder. The handle-levers B are also pivoted together and their shorter arms *b* curved outwardly in opposite directions and pivoted to the extremities of the jaw-lever shanks *a a*. Thus

when the pliers are closed, as shown in full lines, Fig. 1, the curved portions *a a* and *b b* of the jaw-levers A and handle-levers B project together laterally from the median line of the implement. When the jaws A are opened, as shown in dotted lines, Fig. 1, the fulcrum *x x'* of the respective parts A and B are farther apart than when the jaws are closed on a nail or other object, as shown by full lines. It will hence be seen that the implement works on the principle of a toggle-lever, the power becoming greater and the grip of the jaws thereby more powerful as the latter are brought together.

What I claim is—

The improved pliers composed of pivoted jaw-levers having shanks which are curved inwardly in opposite directions and the pivoted lever-handles whose shorter arms are curved outward and oppositely and pivoted to the shanks of said jaw-levers, as shown and described, to operate as specified.

WALTER J. MONTEITH.

Witnesses:

A. J. HOWARD,
GEO. HUMPHREY.