

W. W. AVERY.
PLIERS.

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1,004,524.

Patented Sept. 26, 1911.

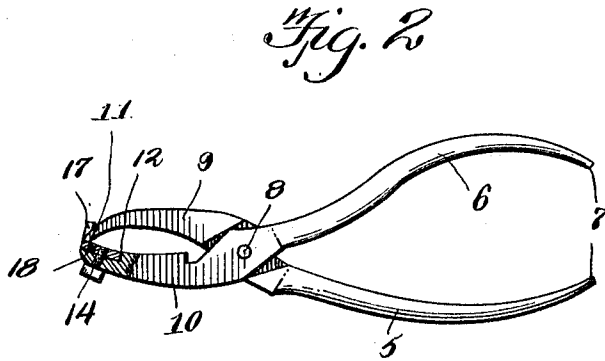
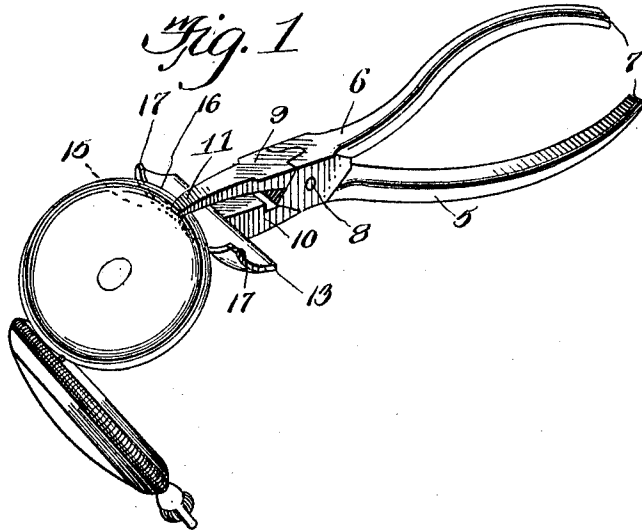
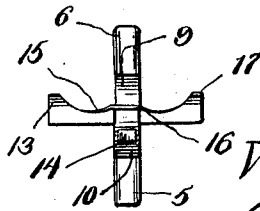


Fig. 3



Witnesses
W. S. McDowell
A. O. Sanders.

Inventor
Walter W. Avery
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

WALTER W. AVERY, OF DOTHAN, ALABAMA.

PLIERS.

1,004,524.

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To all whom it may concern:

Be it known that I, WALTER W. AVERY, a citizen of the United States, residing at Dothan, in the county of Houston and State of Alabama, have invented new and useful Improvements in Pliers, of which the following is a specification.

The invention relates to pliers, and more particularly to the class of pliers for use by watch makers or repairers.

The primary object of the invention is the provision of pliers of this character in which the case of a watch may be straightened or bent both at the hinge joint and the lip of the lid thereof, whereby the said lid may be properly closed for the catching thereof onto the case of a watch.

Another object of the invention is the provision of pliers in which one of the jaws thereof is provided with a member having a shape conforming to the rounded edge of a watch case, so that the same may be readily gripped whereby it can be bent or straightened, as the occasion may require.

A further object of the invention is the provision of pliers of this character in which a watch case or lid thereof may be readily and conveniently gripped whereby the same may be bent or straightened.

A further object of the invention is the provision of pliers which are simple in construction, thoroughly reliable and efficient in operation, and inexpensive in manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, as will be hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claims hereunto appended.

In the drawings: Figure 1 is a perspective view of pliers constructed in accordance with the invention, the same being shown as applied or engaged with a watch case lid for either the bending or straightening thereof. Fig. 2 is a side elevation of the pliers, the same being shown partly in section. Fig. 3 is a front elevation thereof. Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings by numerals, the pliers comprise two crossed lever members 5 and 6 having the usual outwardly

bowed handle extremities 7, the member 6 being fitted in a suitable slot in the member 5 and are connected by means of an ordinary pivot pin 8, whereby the said members may be opened and closed in the usual well-known manner.

Formed on the members 5 and 6 are gripping jaws 9 and 10 respectively, the ends of which are inwardly curved to form biting tips or noses 11. The tip or nose 11 of the jaw 10 at its inner face is cut away to form a seat 12, in which is engaged a gripping wing or plate 13, the latter being provided with a central threaded aperture in which is engaged a binding screw 14, the same being passed through a suitable opening formed in the jaw 10, the binding screw 14 being adapted to secure the plate or wing upon the said jaw 10 of the pliers. This plate or wing 13 is formed in its front or forward edge at opposite sides of the jaw 10 with substantially semi-circular recesses or notches 15 providing on the plate or wing 13 a medial gripping lip 16 and inwardly curved outer gripping lips or nibs 17, so that when the wing or plate 13 is brought into engagement with the watch case or the lid thereof, the notches or recesses 15 will receive and accommodate the rounded edge of the case or lid of the watch, whereby the lip 16 will engage the inner face of the lid or case, while the nose 11 of the jaw 9 when moved will engage the outer face of the said case or lid, thereby enabling the gripping thereof for either the straightening or bending of such lid or case, the nibs 17 serving as abutments for the lid or case, so as to prevent the slipping thereof during the use of the pliers.

Projecting inwardly from the inner face of the seat 12 is a stud or lug 18 which is adapted to fit into a correspondingly shaped recess formed in the wing or plate 13, and when engaged in its recess will prevent the turning of the plate or wing on the jaw 10, but on removing the binding screw 14 from its engagement with the plate or wing 13, the latter may be freely detached from the said jaw 10 of the pliers.

What is claimed is:

1. In pliers, a pair of pivotally connected members having jaws provided with inward-turned noses, one of said jaws being provided with a seat in its inner face, a plate having spaced notches in its forward edge

to provide an intermediate and outer nibs, and means detachably connecting the plate in the seat.

2. In pliers, a pair of pivotally connected
5 members having jaws provided with in-
turned noses, one of said jaws being pro-
vided with a seat in its inner face, a plate
having spaced notches in its forward edge
to provide an intermediate and outer nibs,
10 and a binding screw passed through the jaw
containing the seat and detachably engaging
the plate.

3. In pliers, a pair of pivotally connected
members having jaws provided with in-
15 turned noses, one of said jaws being pro-

vided with a seat in its inner face, a plate
having spaced notches in its forward edge
to provide an intermediate and outer nibs,
a binding screw passed through the jaw con-
taining the seat and detachably engaging 20
the plate, and a lug formed on the jaw con-
taining the seat and engaging the plate to
prevent the turning thereof.

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

WALTER W. AVERY.

Witnesses:

R. C. WILLIAMS,

H. L. McARTHUR.

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