

No. 816,278.

PATENTED MAR. 27, 1906.

A. TRACHT.
PLIERS.

APPLICATION FILED AUG. 24, 1905.

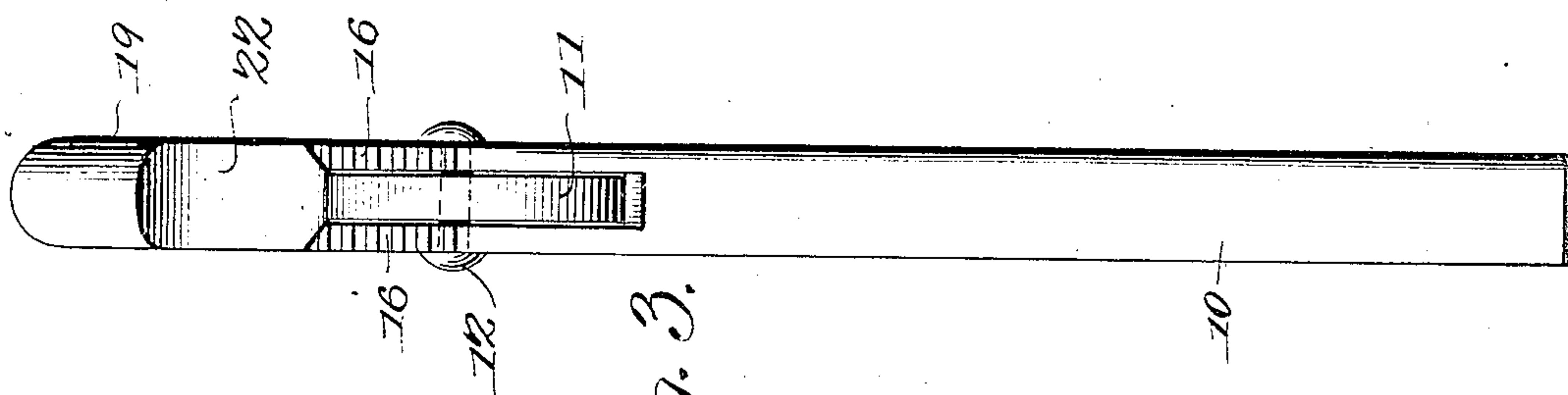


Fig. 3.

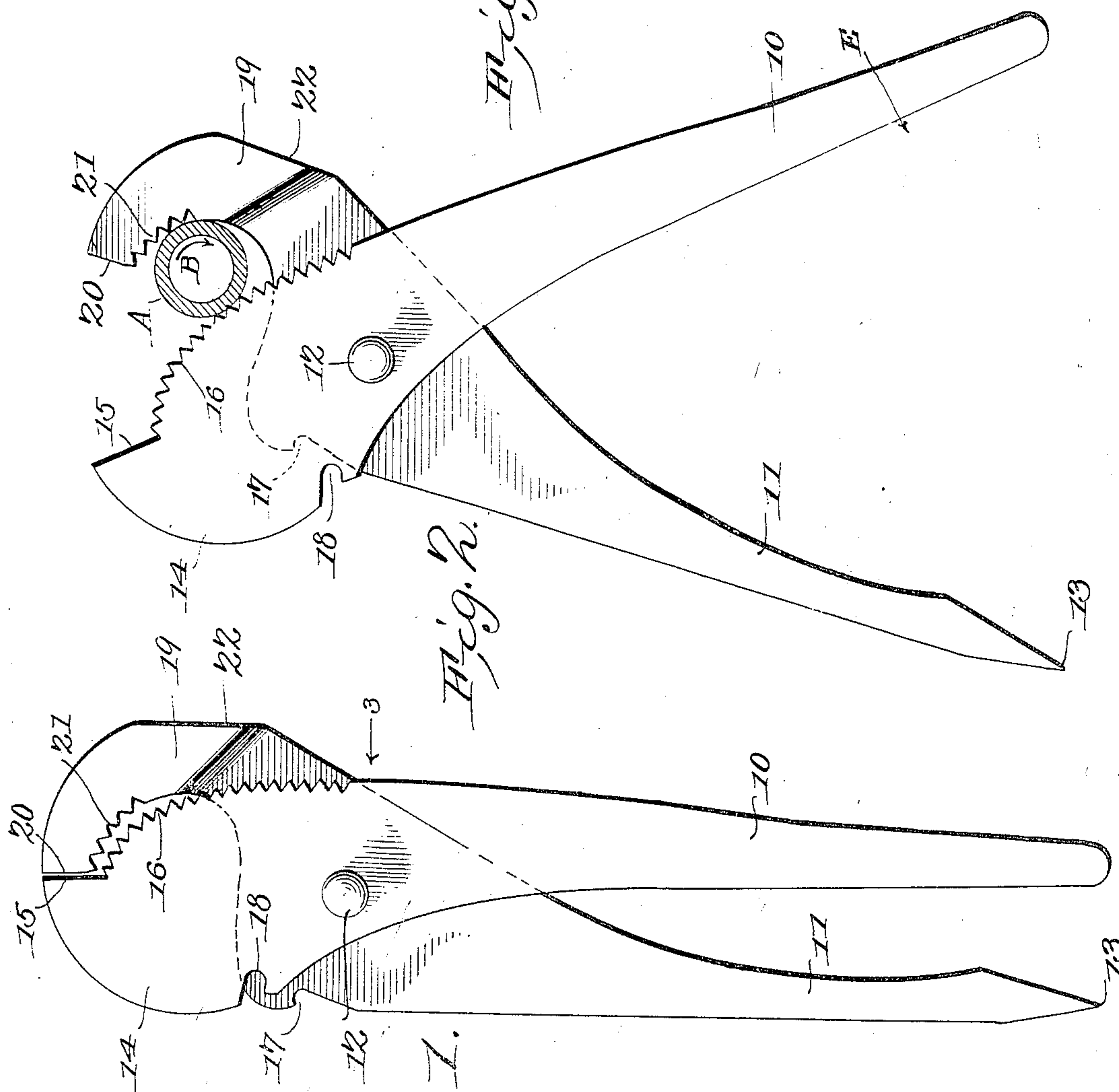


Fig. 2.

Fig. 1.

Witnesses

E. J. Stewart
L. J. Merrill

Allen Tracht, Inventor.
by *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

ALLEN TRACHT, OF GALION, OHIO.

PLIERS.

No. 816,278.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed August 24, 1905. Serial No. 275,658.

To all whom it may concern:

Be it known that I, ALLEN TRACHT, a citizen of the United States, residing at Galion, in the county of Crawford and State of Ohio, have invented a new and useful Pliers, of which the following is a specification.

This invention relates to pliers, and has for its object to provide a device of the class embodying new and improved features of convenience, utility, and efficiency.

It is well known that in using pliers upon a round surface the grip of the jaws must be produced by the pressure exerted by the hand of the user upon the levers.

It is an object of this invention to provide pliers wherein the work is gripped at one side of the pivot and in such position that the greater the resistance to be overcome the more tightly will the pliers grip, the work being gripped even by pulling upon only one of the levers.

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

In the drawings, Figure 1 is a view in side elevation of the improved pliers closed. Fig. 2 is a view in side elevation of the improved pliers operatively applied. Fig. 3 is a view of the improved pliers in edge elevation.

Like characters of reference indicate corresponding parts in all of the figures of the drawings.

In its preferred embodiment the improved pliers forming the subject-matter of this application comprises levers 10 and 11, pivoted, as at 12, and the lever 11, having a screw-driver 13 formed at its end. Adjacent the pivot the lever 10 is broad and with the pivot adjacent one side and having the jaw 14 carried thereon, with a work-engaging face 15 in alinement with the pivot. A toothed work-engaging face 16 is formed along one edge of the jaw and at one side of the pivot and conforms substantially to a parabolic curve whose directrix passes through the pivot. The jaw 11 is also formed broad adjacent the pivot and has at one side a notch 17, cooperating with the notch 18 in the lever 10 to form a wire-cutter. Opposite the notch 17 the lever is provided with a jaw 19, offset

therefrom and having a work-engaging face 20, alined with the pivot and cooperating with the face 15, and a concave toothed work-engaging face 21, complementing and conforming substantially in form to the parabolic face 16. The jaw 19 is also provided with a substantially plane surface 22, disposed for use as a hammer.

With the pliers applied to work, as upon the pipe A in Fig. 2, it will be readily understood that a clamping movement of the levers 10 and 11 will clamp the work. If, however, it is desired to rotate the work in the direction indicated by the arrow B, the handle 10 may be grasped and forced in the direction of the arrow E, Fig. 2.

Having thus described the invention, what is claimed is—

1. Pliers embodying crossed and pivoted levers provided with jaws having work-engaging faces substantially in alinement with the pivot and continued by complementary faces disposed entirely upon one side of a plane including the alined jaw-faces and the pivot.

2. Pliers embodying crossed and pivoted levers provided with jaws opposite the levers and having work-engaging faces substantially in alinement with the pivot and continued by complementary serrated faces disposed entirely upon one side of a plane including the alined jaw-faces and the pivot.

3. Pliers embodying crossed and pivoted levers provided with jaws opposite the levers and having work-engaging faces substantially in alinement with the pivot and continued by complementary curved serrated faces disposed entirely upon one side of a plane including the alined jaw-faces and the pivot.

4. Pliers embodying crossed and pivoted levers provided with jaws, one of which has a work-engaging face conforming substantially to a parabolic curve whose directrix passes through the pivot and the other jaw provided with a complementary curved face.

5. Pliers embodying crossed and pivoted levers provided with jaws one of which has a serrated work-engaging face conforming substantially to a parabolic curve whose directrix passes through the pivot and the other jaw provided with a complementary serrated work-engaging face.

6. Pliers embodying crossed and pivoted
levers provided with jaws opposite the levers
and having work-engaging faces substan-
tially in alinement with the pivot and con-
5 tinued one by a parabolic face and the other
by a concave face complementary to the
parabola and both wholly upon the same side
of the pivot.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature 10
in the presence of two witnesses.

ALLEN TRACHT.

Witnesses:

R. C. TRACHT,
J. M. TRACHT.