

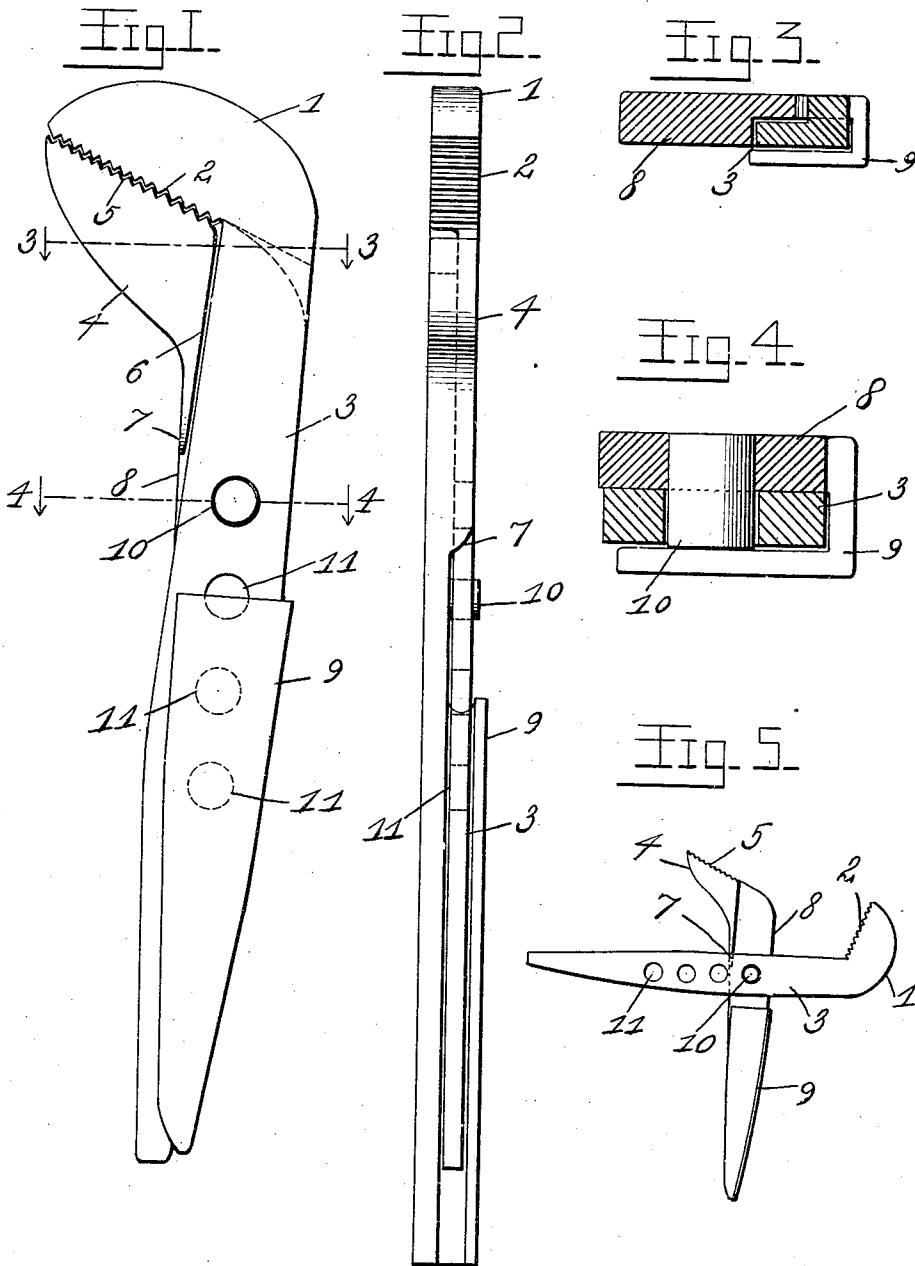
T. P. GIOVANOLA & F. CERRATO.

TOOL.

APPLICATION FILED JAN. 9, 1913.

1,065,124.

Patented June 17, 1913.



Witnesses
J. R. Hoge
W. F. Collier.

Inventors
T. P. Giovanola
F. Cerrato

By *A. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

TRANQUILLO P. GIOVANOLA AND FRANCESCO CERRATO, OF LOS ANGELES,
CALIFORNIA.

TOOL.

1,065,124.

Specification of Letters Patent.

Patented June 17, 1913.

Application filed January 9, 1913. Serial No. 741,033.

To all whom it may concern:

Be it known that we, TRANQUILLO P. GIOVANOLA, citizen of the United States, and FRANCESCO CERRATO, citizen of Italy, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Tools; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to tools, and more especially to those wherein the gripping jaws may be properly adjusted in respect to one another.

The primary object of the invention is in the provision of an implement of the character described, whereby the gripping jaws are not only capable of various adjustments in respect to one another, but the two members of the tool are adapted to be readily and conveniently separated.

A further object of the invention is in the particular construction of the handle of one of the jaws which is adapted to removably receive the handle of the other jaw, whereby the jaws and handles thereof are removably connected.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings: Figure 1 is a side elevation of the complete invention showing the parts properly assembled. Fig. 2 is an edge view of the tool showing one of the jaws in an adjusted position in respect to the other jaw. Fig. 3 is a transverse section on the line 3—3 of Fig. 1. Fig. 4 is a similar section taken on the line 4—4 of Fig. 1. Fig. 5 is a reduced side elevation of the tool with the jaws in a position to be separated from one another.

In the illustrative embodiment of the invention, 1 represents the outer jaw of the tool which is provided with the usual gripping corrugations or serrations 2, said jaw having integrally formed therewith a handle 3 of proper design and length. The accompanying jaw 4 of the tool is of the usual construction or approximately the same shape as the jaw 1, and is also provided with serrations 5 which mesh with or are

received by the similarly constructed serrations or gripping surfaces 2 formed on the jaw 1 of the handle 3. The jaws 1 and 4 are substantially the same width along their gripping surfaces, the said jaw 4 terminating, however, in a reduced extension 6, the lower end of which is provided with a cam surface 7 for the purposes hereinafter described. The jaw 4 is also provided with a handle 8 which is particularly constructed for receiving the handle 3 of the other jaw, said handle of the jaw 4 having an overlapping portion 9, whereby the handle 3 is freely received and interlockingly engaged with the handle 3 of the jaw 1. The upper edge of the overlapping portion 9 of the jaw 8 is positioned a suitable distance from the lower cam end 7, as clearly shown in Fig. 1, for the purposes now to be described. Projecting from and preferably forming an integral part of the handle 8 is a lug 10 which is received by any one of a plurality of openings 11 formed in the handle 3, whereby the jaws of the tool may be properly adjusted in respect to one another. When the members of the tool are located in the position as shown in Fig. 5, for releasing said members in order to adjust the same, the front edge of the handle 3 will be brought into engagement with the cam lower end 7 of the jaw 4, whereby the handle 3 of the jaw 1 will be readily removed from its engagement with the lug 10 of the other member for further adjustment. The overlapping portion 9 of the jaw 8 is properly shaped to form a firm gripping surface and protect the hand of the operator from being injured when the handles are brought together when the tool is applied to an object.

From the foregoing description, it will be seen that while the tool is comparatively simple in construction, it is very effective and practical for the purposes for which it is designed and further, that when it is desired to adjust the jaws, the members can be readily and conveniently separated and subsequently connected in a manner previously described.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may

be resorted to without departing from the principle or sacrificing any of the advantages of the invention as claimed.

What is claimed is:—

- 5 A tool comprising two members having gripping jaws, the handle of one of said jaws being provided with a plurality of openings formed along the length thereof, the jaw of the other member having a tapering portion terminating in a cam-shaped
10 inner end, an overlapping portion forming a part of the handle of said last named member for receiving the handle of the other member, whereby said handles are
15 properly engaged and held in operative engagement with one another, and a lug projecting from the member having the over-

lapping portion for removable engagement with any one of the openings in the other handle, the outer edge of said overlapping portion being positioned a suitable distance below the lug and cam end, whereby the members of the tool may be readily separated and adjusted in respect to one another.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

TRANQUILLO P. GIOVANOLA.
FRANCESCO CERRATO.

Witnesses:

J. H. FLACK,
JOSEPH W. SMITH.

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