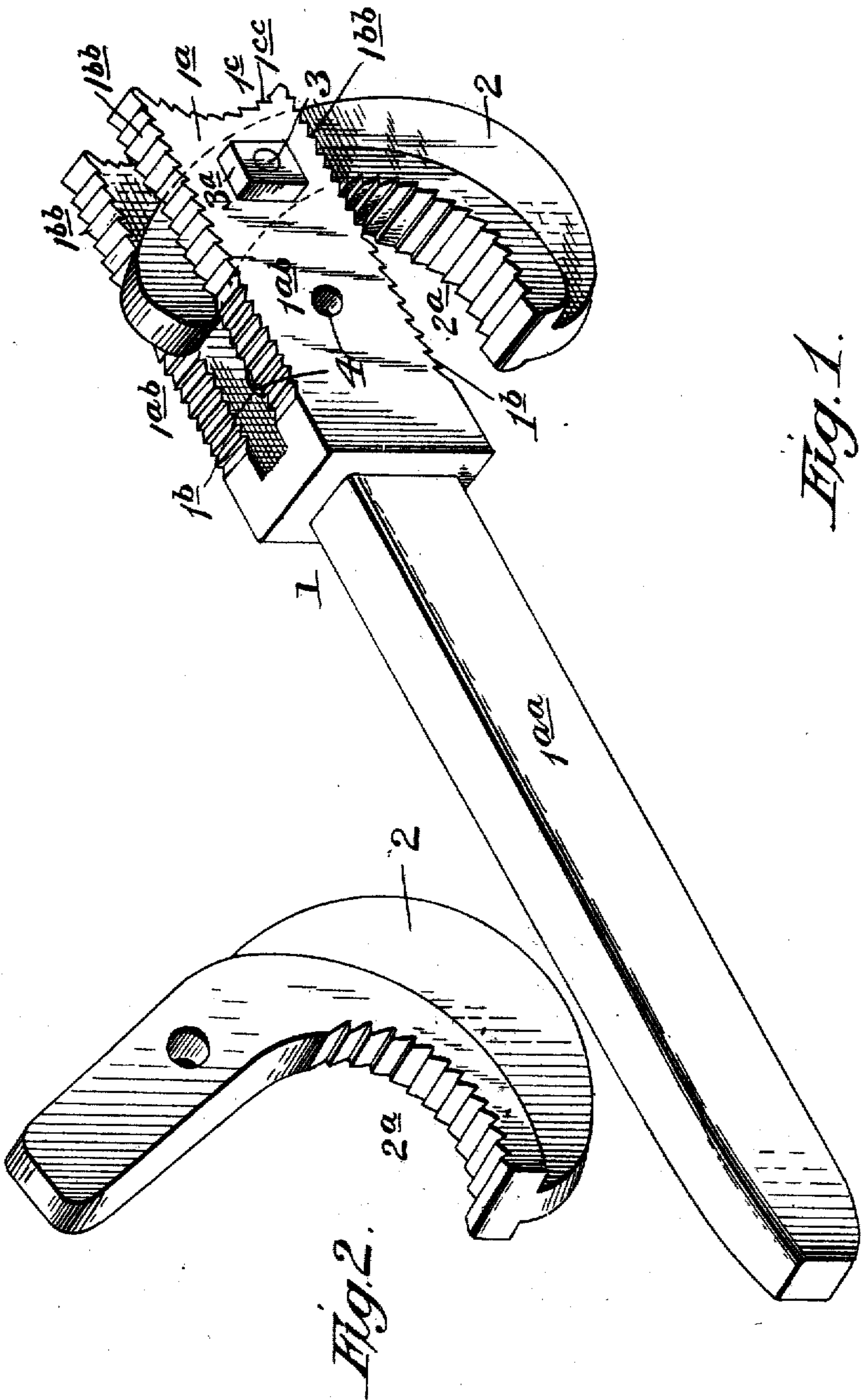


G. W. AUSTIN.
WRENCH.

APPLICATION FILED MAY 12, 1906.

2 SHEETS—SHEET 1.



Witnesses:
W. A. Curran
J. H. Foster

Inventor:
George W. Austin,
By Sam. Rager Esq
Attorneys

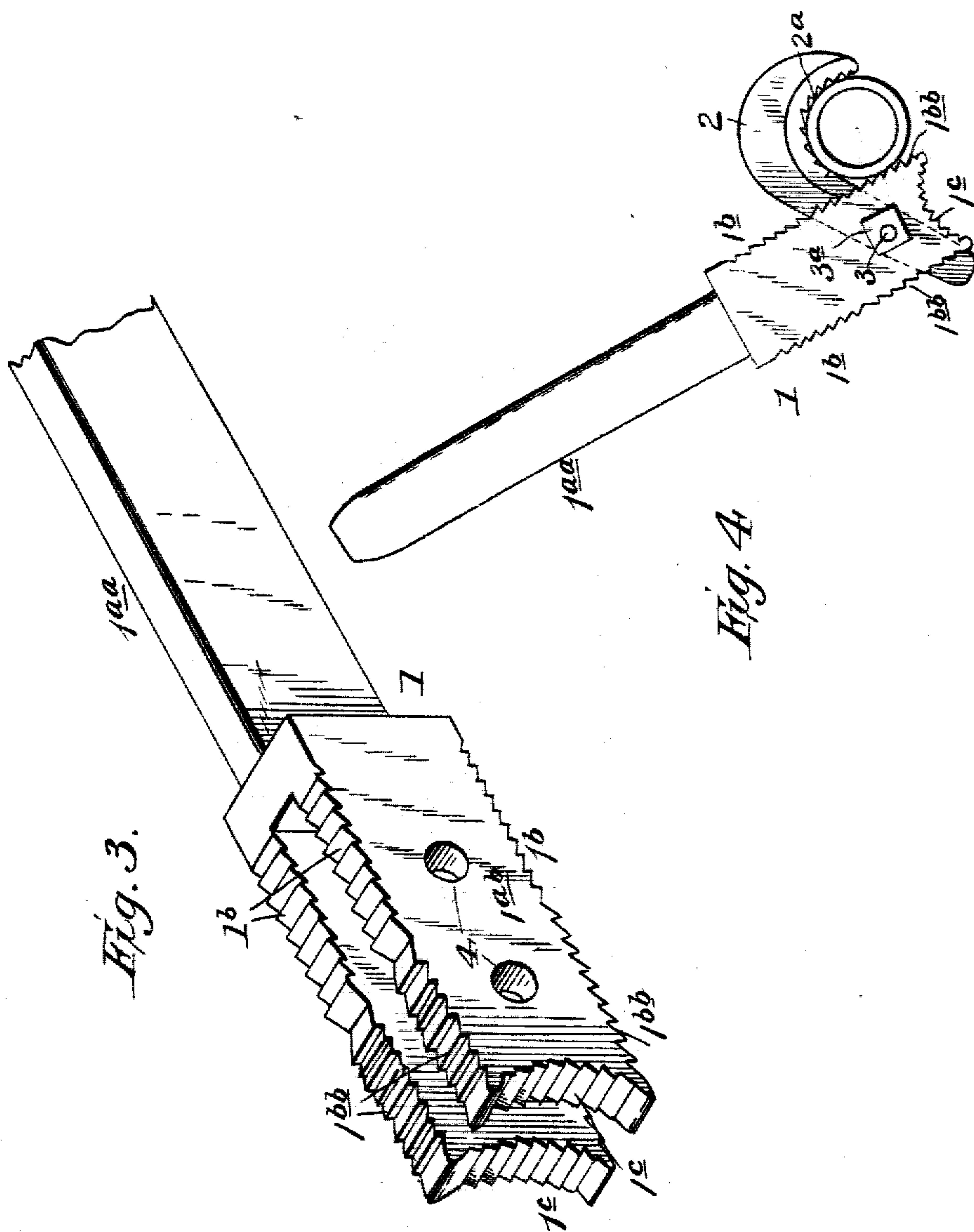
No. 814,343.

PATENTED MAR. 6, 1906.

G. W. AUSTIN.
WRENCH.

APPLICATION FILED MAY 12, 1905.

2 SHEETS—SHEET 2.



WITNESSES:
W. N. Durand
J. H. Foster

INVENTOR:
George W. Austin.
By
Sam. Rager & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE W. AUSTIN, OF HOLLISTER, CALIFORNIA.

WRENCH.

No. 814,343.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed May 12, 1905. Serial No. 260,133.

To all whom it may concern:

Be it known that I, GEORGE W. AUSTIN, a citizen of the United States, residing at Hollister, in the county of San Benito and State of California, have invented new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to improvements in wrenches.

The objects of the invention are to provide for efficiency and simplicity and extended use, especially in screwing together pipe-sections and unscrewing the same one from the other; and to these ends the invention consists of certain structural features substantially as hereinafter fully disclosed and specifically pointed out.

In the accompanying drawings, Figure 1 is a perspective view of my invention in its preferred embodiment. Fig. 2 is a disassembled view of the pivoted jaw or claw member. Fig. 3 is a view of the stationary or handled jaw member with the aforesaid jaw member and pivot-bolt removed. Fig. 4 is a view showing one application of the tool or wrench which is suggestive of the several other forms of its application.

In the disclosure of my invention I provide a handled or stationary jaw member 1, having its handle or lever portion 1^{aa} of suitable length for obtaining the requisite purchase or leverage in practical use. Its jaw proper, 1^a, integral with the handle or lever, is composed, preferably, of suitably-spaced-apart right-lined arms 1^{ab}, between which is hung a movable or pivoted jaw member 2 upon a pivot-bolt 3, passed through registering holes in said arms and pivoted jaw member and having the usual headed end and a nut 3^a applied to its opposite end for the retention thereof in place. Said arms 1^{ab} are each provided or equipped upon both of its right-lined or perpendicular edges with two sets of ratchet-teeth 1^b 1^{bb}, with their effective edges facing in opposite directions for a purpose presently seen. Said right-lined arms are each produced with a concaved or arcuate forward edge 1^c, also equipped with numerous ratchet-teeth 1^{cc}, effective for the application of the wrench, as will later appear.

The movable or pivoted jaw member 2, preferably having its back edge formed fin-like, is of the general outline disclosed, being hook like with its inner concaved surface or edge equipped or armed with numerous ratchet-teeth 2^a. It will be noted that the

movable jaw member, as also the stationary jaw member proper, are formed of steel, the purpose of which is obvious, and that the handle or lever portion of the latter member is designed to be of ordinary iron formation, as well understood.

The stationary jaw member 1^a is provided with additional pivot-bolt-receiving holes, as at 4, to provide for adjusting the movable jaw member, as in accommodating the wrench to varying or different sizes of pipe-sections in operating thereon. It is also noted that this wrench is capable of use for turning pipe-sections of from the size of an ordinary lead-pencil in cross-section to two and a half inches in diameter and that, so far as my knowledge extends, it is the only wrench known which is effective without the additional use of a chain or screw or other like means for screwing together or separating very large pipe-sections.

The movable hook or jaw member may be made any practical size, larger or smaller, the other members or parts being proportioned accordingly in size.

In the use of this wrench or tool it may be applied with its hook member caught under a pipe-section, say, of large diameter and the adjoining lateral ratchet-toothed edge of the stationary jaw member resting oppositely upon the pipe-section. By exerting the requisite pressure upon the wrench lever or handle and then releasing the grip of the jaws upon the pipe thus imparted thereto and by doing this intermittently, as will be obvious, the operation of screwing together pipe-sections or effecting the unscrewing or separating one from the other will be apparent, presumably one pipe-section being firmly gripped in any suitable way against turning, as will be appreciated, or where occasion may require the hook member may be caught over the pipe-section and the opposite lateral edge of the stationary wrench jaw member brought into contact with the pipe-section, having, as above noted, oppositely-facing ratchet-teeth for that purpose. In this example of the use of the wrench it will be noted that the presentation of the movable jaw for effectiveness or as relates to the application of the power or pressure is such that a pipe of much smaller cross-section may be gripped and acted upon in like manner as aforesaid. Again, the wrench may be applied axially by presenting the concaved edge of the fixed jaw member to the pipe-section with the hooked or mov-

able jaw member resting laterally upon the pipe, which would impart, it has been practically demonstrated, a very powerful and effective gripping action.

5 I claim—

1. A device of the character described, comprising a handled jaw member, a claw-like jaw member and a pivotal connection therebetween, the claw-like jaw member having its curved gripping-surface adapted to face downward, at a point above and forward of the opposed gripping-surface of the handled jaw member, and the latter adapted to stand in a rearward and upward angle of inclination, for effectiveness.

2. A device of the character described, comprising a handled bifurcated jaw member, a claw-like jaw member, and a pivotal connection therebetween, the prongs or branches of the handled jaw member having serrated gripping edges and arranged to stand in a rearward and upward inclination, and the curved gripping edge of the claw-like jaw member adapted to face downward, at a

point above and in front of the aforesaid gripping edge of the handled jaw member. 25

3. A wrench comprising a handled bifurcated jaw member having its branches or prongs provided upon their right-lined edges with oppositely-pointing series of gripping teeth or serrations, said branches also having concaved serrated forward-end gripping edges, a claw-like jaw member having a serrated concaved gripping edge, and a pivot-bolt connection between the handled jaw member and the claw-like jaw member, the handled jaw member adapted to permit the shank of the claw-like jaw member to move between its branches or prongs and beyond the forward ends thereof for effecting the various adjustments of the claw-like jaw member. 35 40

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

GEORGE W. AUSTIN.

Witnesses:

ERNEST C. GRIFFIN,
E. H. FOSTER.