

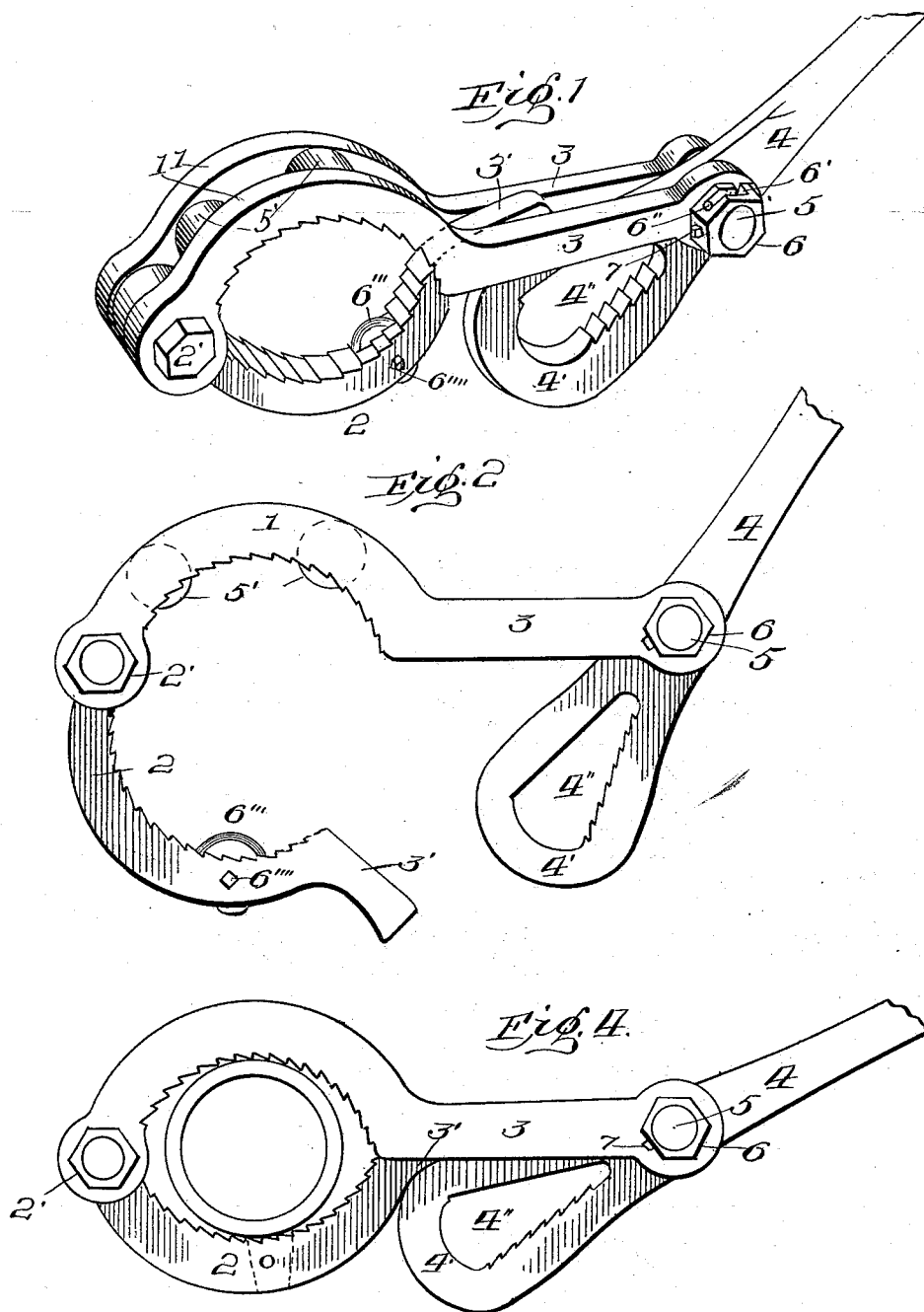
No. 647,685.

Patented Apr. 17, 1900.

J. STEWART.
COMBINED PIPE WRENCH AND CUTTER.

(Application filed Oct. 25, 1899.)

(No Model.)



Witnesses:
E. Underwood
R. H. Bates

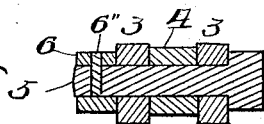


Fig. 3.

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UNITED STATES PATENT OFFICE.

JOHN STEWART, OF FORT DEFIANCE, ARIZONA TERRITORY.

COMBINED PIPE WRENCH AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 647,685, dated April 17, 1900.

Application filed October 25, 1899. Serial No. 734,718. (No model.)

To all whom it may concern:

Be it known that I, JOHN STEWART, a citizen of the United States, residing at Fort Defiance, in the county of Apache and Territory of Arizona, have invented certain new and useful Improvements in a Combined Pipe Wrench and Cutter; and I do hereby 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 improvements in combined pipe wrenches and cutters.

It has for its objects to provide for efficiency and expedition of operation and simplicity of construction and to lessen the cost of manufacture.

It consists of curved or arcuate jaws articulated or jointed together with rectilinear extensions or arms, one adapted to carry a removable cutter or bit and the others carrying between them rolls, and a handle or lever connected to the latter jaws and having a cam or enlargement adapted to act upon the cutter-carrying jaw-arm, all substantially as hereinafter more fully disclosed, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my combined pipe wrench and cutter in its preferred form. Fig. 2 is a side view thereof with the jaws in the open position. Fig. 3 is an axial section of the lever or handle and jaws between which it is articulated. Fig. 4 is a view showing the invention adapted to serve as a wrench only, the cutter and rolls being removed.

Latitude is allowed herein as to details, as they may be changed or varied at will without departing from the spirit of my invention and the same remain intact and be protected.

In the organization of my invention I employ two parallel curved or arcuate jaws 1 1 and a third similar jaw 2, with their outer ends articulated or jointed together, said ends being suitably adapted or formed with eyes to receive a headed and nutted pivot-bolt or pintle 2'. Said jaws are provided with rectilinear extensions or arms 3 3', respectively, at their opposite ends and are themselves preferably serrated, notched, or toothed upon their concave or inner surfaces to afford a

greater or increased gripping action thereof upon the pipe or article to which they may be applied.

The handle or lever 4 is pivoted or fulcrumed between the extensions or arms 3 of the parallel jaws 1 1 by means, preferably, of a pivot-bolt 5 passed through the inner ends of said extensions or arms and through said handle or lever, said pivot-bolt being headed at one end and provided at its opposite end with a collar 6, having a right-angled or bayonet slot 6' engaging a stud or projection 6'' on said pivot-bolt. This collar, which would thus practically be prevented from having endwise displacement, is more effectually held in place by a set-screw 7, passed laterally through said collar and caused to engage said pivot-bolt.

The lever or handle 4 is formed or provided beyond its pivot or point of connection with the jaws 3 with an enlargement or cam 4', preferably flared or widened edgewise toward one end to adapt it to engage or bear upon the short arm or extension 3' of the jaw 2, causing the latter, together with the opposite parallel jaws, to grip the pipe or article operated upon.

The cam or enlargement 4' is convex or rounded upon its widened or flared portion, and the short arm or extension 3' of the jaw 2 is concaved or curved upon its outer surface to readily receive said convex surface of cam.

The lever or handle 4 is provided in its enlargement or cam-ended portion with a tapered opening 4'', preferably as shown, one side or edge being serrated, notched, or toothed, adapting it to serve as a supplemental wrench, as will be readily understood.

The device as thus far described constitutes a pipe-wrench, it only being required in order to use the same to spread the jaws and apply them to the pipe or circular body, they then being closed upon the latter and the cam or enlargement 4' caused to engage the short arm of the jaw 2 by suitably manipulating the handle or lever 4, thus firmly and effectively gripping the pipe or other article. Parallel jaws 1 1 have arranged or interposed between them rolls 5' to properly fulcrum or move the same upon the pipe, preferably having their axes or journals let into sockets or recesses in the opposite sides of said jaws,

said sockets being only of sufficient depth to receive said axes or journals and not passing entirely through said jaws to avoid unnecessarily weakening the latter.

5 A cutter or blade 6''' is removably set into the jaw 2, its cutting edge being presented toward the article or pipe interposed between the jaws to be operated upon and suitably projecting beyond the inner surfaces or faces
10 of the jaws according to the extent of the cut to be made. This cutter or blade is held in a socket or opening made in the jaw by a suitable set or binding screw 6'''. Thus equipped the wrench is adapted to act as a
15 pipe-cutter, the application and operation thereof being substantially as above described. In using the device as a pipe-wrench the cutter and rolls are removed, readily effected by the separation of the parts and the
20 withdrawal of the cutter-holding set-screw, as will be readily understood.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

25 1. A combined pipe wrench and cutter comprising a plurality of pivoted-together arcuate or curved jaws, two arranged parallel and the third having a rectilinear arm extension, adapted to extend between said parallel jaws,
30 and a handle or lever pivoted between said parallel jaws and having one end engaging the arm extension of said third jaw, between said parallel jaws, substantially as described.

2. The combined pipe wrench and cutter,
35 comprising three pivoted-together curved or arcuate jaws, two arranged parallel and having rectilinear arm extensions, and the third having also a rectilinear arm extension, adapted to extend between the rectilinear arm ex-
40 tensions of said parallel jaws, and a cam-ended lever pivoted between the rectilinear arm extensions of said parallel jaws, and having its cam end adapted to bear upon the
45 rectilinear arm extension of said third jaw, between the rectilinear arm extensions of said parallel jaws, substantially as set forth.

3. The combined pipe wrench and cutter,

comprising the three curved or arcuate jaws, two arranged parallel and the third arranged
intermediately thereof, and pivoted together
50 at their outer ends, the parallel jaws having rectilinear arm extensions, and the third jaw having also a rectilinear arm extension adapted to extend between the aforesaid rectilinear arm extensions, and a lever pivoted
55 between the rectilinear arm extensions of said parallel jaws, and having a divergent or flared cam-ended portion adapted to engage the rectilinear arm extension of said third jaw, between the rectilinear arm extensions of
60 said parallel jaws, substantially as set forth.

4. The combined pipe wrench and cutter comprising curved or arcuate pivoted jaws having rectilinear arms or extensions, one of
said jaws carrying a cutter or blade, and a
65 handle or lever connected to the other of said jaws, and having a cam-ended portion or enlargement adapted to engage the arm of the jaw carrying said cutter substantially
as set forth.

5. The combined pipe wrench and cutter, comprising curved or arcuate pivoted jaws, one of said jaws carrying a cutter and the
other jaws carrying rolls, and a handle or
75 lever, connected to the roll-carrying jaws and having a cam-ended portion or enlargement adapted to engage the arm or extension of the cutter-carrying jaws, substantially as set forth.

6. The combined pipe wrench and cutter, 80 comprising suitably-pivoted jaws, a handle or lever connected to two of said jaws, a pivot-bolt between said lever and connected jaws, having a lateral projection or stud, and a collar having a right-angled, or bayonet
85 slot adapted to engage said projection or stud, substantially as specified.

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

JOHN STEWART.

Witnesses:

W. H. H. BENEFIELD,
CHARLES DRURY.