

(No Model.)

L. WÄCHTLER.
PIPE WRENCH.

No. 516,286.

Patented Mar. 13, 1894.

Fig. 1

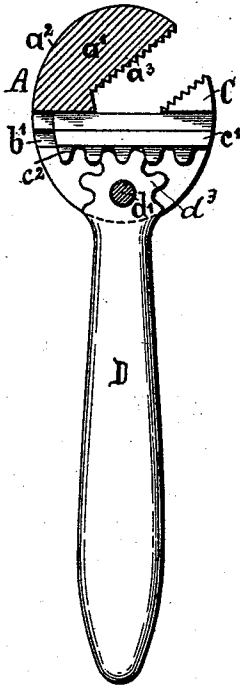


Fig. 2

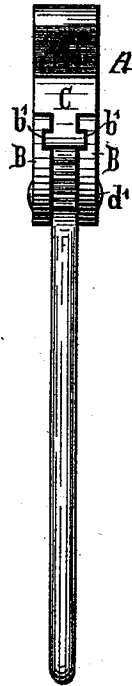


Fig. 3

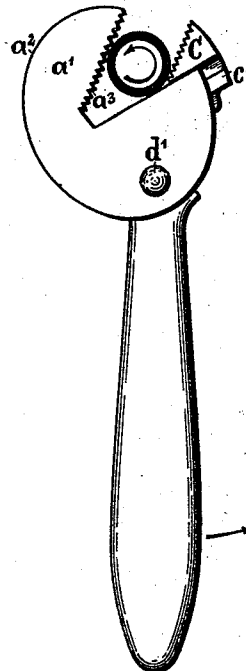
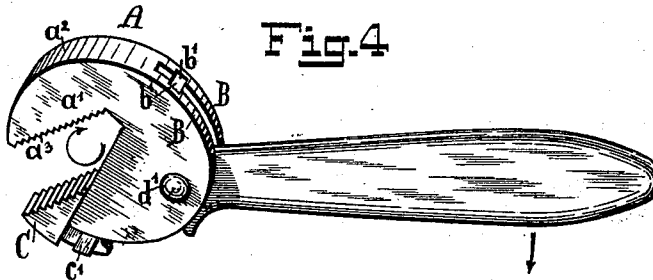


Fig. 4



Witnesses:
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UNITED STATES PATENT OFFICE.

LOUIS WÄCHTLER, OF ALTENBURG, GERMANY.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 516,286, dated March 13, 1894.

Application filed October 2, 1893. Serial No. 487,028. (No model.) Patented in Austria-Hungary December 14, 1891, No. 40,259 and No. 73,559.

To all whom it may concern:

Be it known that I, LOUIS WÄCHTLER, a subject of the Emperor of Germany, residing at Altenburg, in the Grand Duchy of Saxony and Empire of Germany, have invented certain new and useful Improvements in Pipe-Wrenches, (for which I have obtained a patent in Austria-Hungary, No. 40,259 and No. 73,559, bearing date December 14, 1891,) of which the following is a specification.

My invention relates to and has for its object, the provision of a pipe wrench which can be easily and quickly adjusted to grip any sized pipe that can be inserted between the jaws thereof, and consists of the novel construction, arrangement and combination of parts all of which will be hereinafter more fully described.

In the accompanying drawings, Figure 1 represents a side view, part broken away, of my invention. Fig. 2 represents an edge view of the same. Fig. 3 represents a side view of wrench showing position of jaws and wrench when adjusted to grip a pipe. Fig. 4 represents a perspective view of wrench.

The wrench as shown in the drawings, is provided with a head A having a fixed jaw a' thereon, with a curved outer face a^2 and an oblique angled serrated inner face a^3 which causes the same to assume the shape of a hook. The head A consists essentially of two plates or flanges B B, which are connected by the fixed jaw a' ; these plates or flanges being provided on their inner faces with horizontal grooves $b' b'$ diametrically opposite each other, and are for the reception of the laterally extending flanges $c' c'$ on each side of sliding jaw C for the purpose of holding said jaw in position and alignment while sliding back and forth. The lower part of sliding jaw C as shown, is elongated so as to strengthen the same and at the same time allow the jaw to be opened to a greater extent; the same having laterally extending flanges $c' c'$ on

each side for the purpose hereinafter described, and rack gearing c^2 on the bottom thereof. The head A and handle D are pivotally connected to each other by a pivot pin d' which passes transversely through the flanges or plates B B and handle D. The handle D being pivoted between the flanges B B in such a manner as to cause the segment gear d^3 , into which the handle terminates at its upper end, to mesh with rack c^2 of sliding bar or jaw. The wrench as herein described, is simple, strong and durable, and can be easily and quickly adjusted to pipes of various sizes by simply moving the handle to the left, which causes the sliding jaw to open, or vice versa to close the same. Thus in turning a pipe in a certain direction, the harder the pipe turns, the more force is applied to the handle, which in turn causes the sliding jaw to grip the pipe much firmer, this being an important feature in using a pipe wrench.

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

A wrench comprising a handle terminating at its upper end into a segment gear, and pivoted between two parallel plates or flanges, of a fixed jaw having an oblique angled serrated inner face connecting said plates or flanges, and a horizontal sliding bar having an oblique angled serrated inner faced jaw thereon, and provided on the under side thereof with rack gearing, with which the segment gear of handle meshes, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in the presence of two subscribing witnesses.

LOUIS WÄCHTLER.

Witnesses:

CARL BORNGRAEBER,
CARL TAUSCH.