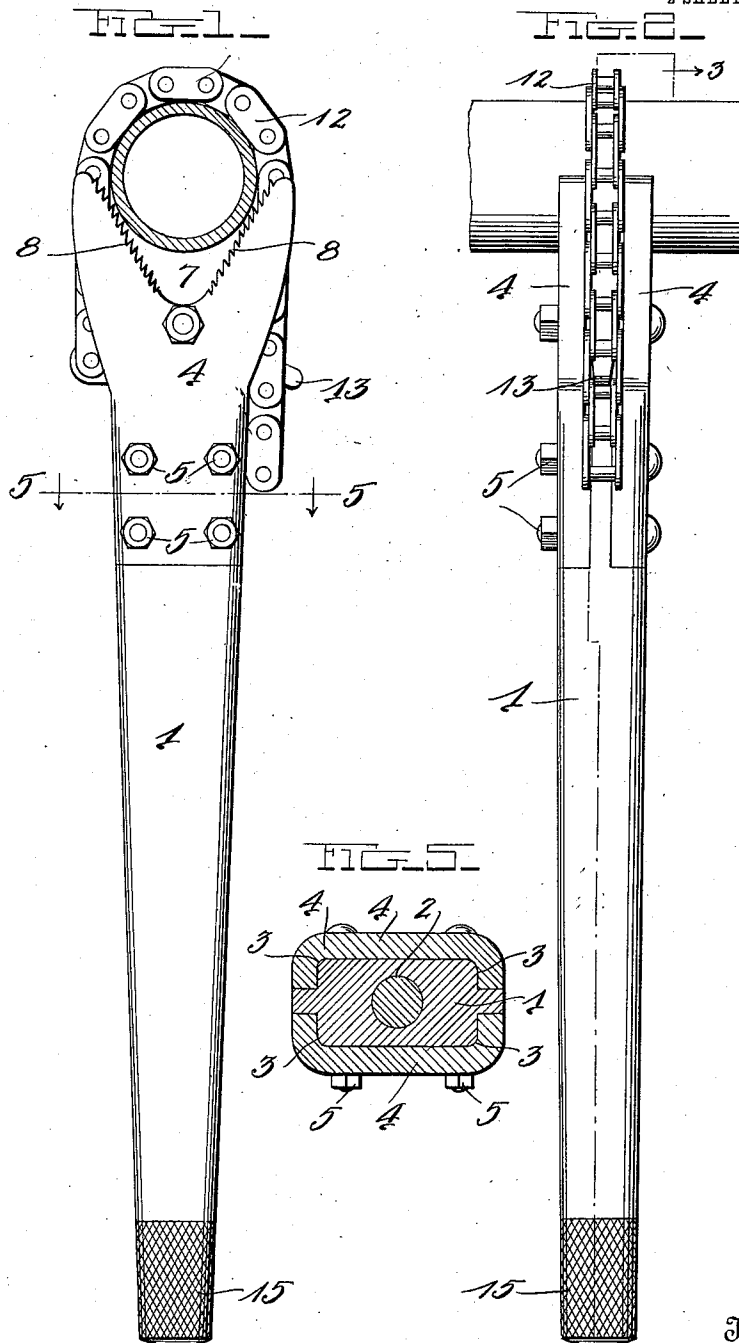


DE MONT CARYL.
CHAIN PIPE WRENCH.
APPLICATION FILED MAR. 20, 1911.

1,015,667.

Patented Jan. 23, 1912.

2 SHEETS—SHEET 1.



Witnesses
D. R. Pierce
O. B. Hopkins

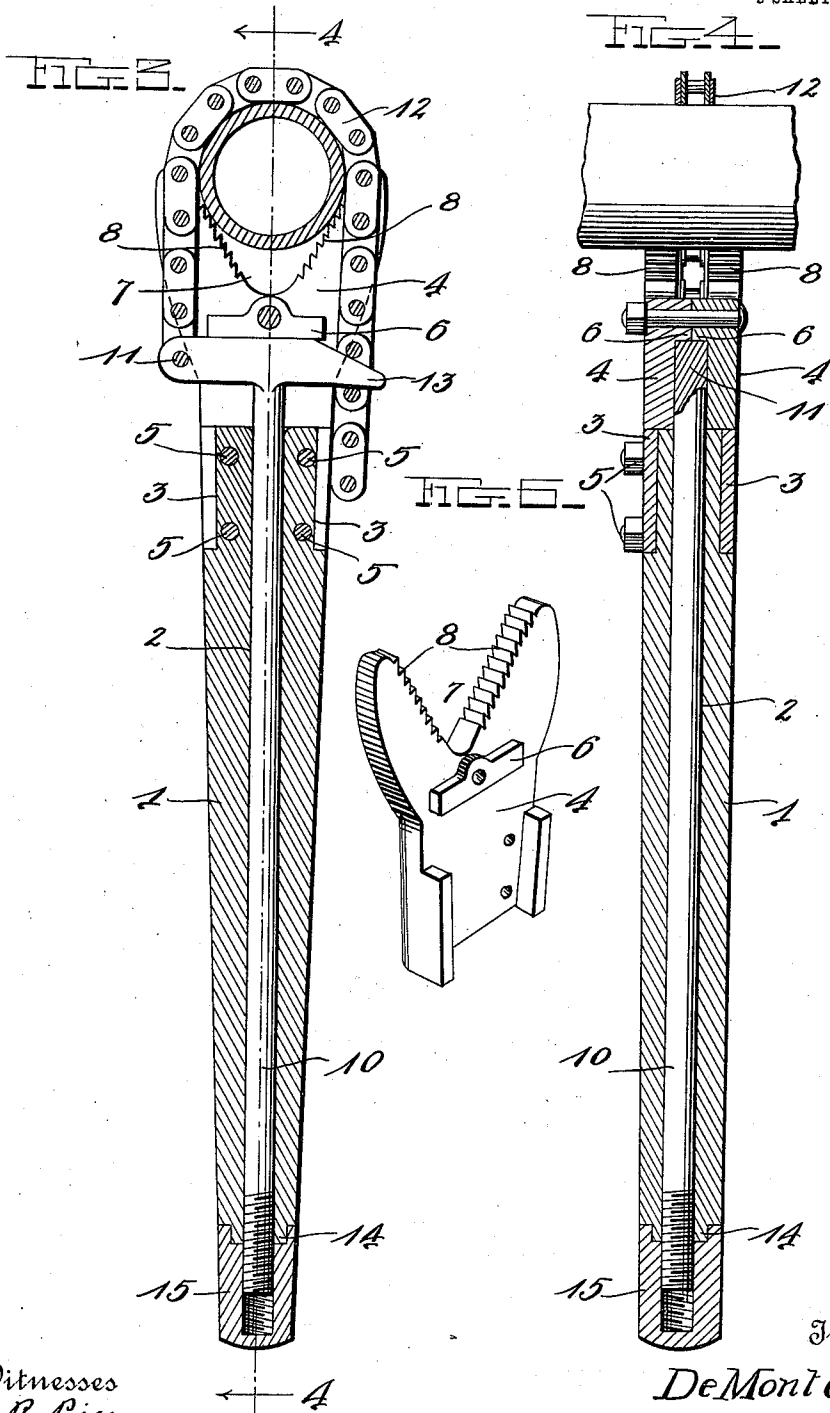
Inventor
DeMontCaryl.
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Attorneys

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UNITED STATES PATENT OFFICE.

DE MONT CARYL, OF WISCOY, NEW YORK.

CHAIN PIPE-WRENCH.

1,015,667.

Specification of Letters Patent.

Patented Jan. 23, 1912.

Application filed March 20, 1911. Serial No. 615,460.

To all whom it may concern:

Be it known that I, DE MONT CARYL, a citizen of the United States, residing at Wiscoy, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Chain Pipe-Wrenches; and I 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 improvements in chain pipe wrenches.

One object of the invention is to provide a wrench of this character having an improved construction and arrangement of pipe engaging jaws and chain whereby the wrench may be operated to turn the pipe in either direction without removing it from the pipe or reversing the parts.

Another object is to provide a wrench of this character having an improved construction of chain adjusting mechanism whereby the chain may be readily tightened around the pipe.

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 particularly pointed out in the appended claim.

In the accompanying drawings:—Figure 1 is a side view of a wrench constructed in accordance with my invention; Fig. 2 is an edge view of the same; Fig. 3 is a central vertical longitudinal section; Fig. 4 is a similar view taken at right angles to Fig. 1; Fig. 5 is a cross sectional view on the line 5—5 of Fig. 1; Fig. 6 is a detail view of one of the jaws of the wrench.

My improved wrench comprises a handle 1 having therein a central longitudinal bore or passage 2 and having the opposite sides of its outer end recessed as at 3 to form seats to receive the jaws 4 of the wrench, said jaws being secured to the handle by a plurality of bolts 5 as shown. On the inner sides of the jaws are formed inwardly projecting transverse spacing lugs 6 which also serve as stops for the chain operating devices hereinafter described. The outer ends of the jaws are made of "alligator" form by means of recesses 7 the edges of which have formed thereon ratchet teeth 8, all facing outward whereby said edges are caused to obtain a firm grip on the pipe or object

to be turned. The outer portions of the jaws are rigidly connected by a bolt 9 arranged in aligned apertures formed in the jaws and spacing lugs 6 as shown.

Arranged in the handle is a chain attaching and adjusting member comprising a shank 10 having a sliding engagement with the passage 2, and on the outer end of the shank between the jaws 4 a transversely disposed head 11 to one end of which is pivotally connected one end of a pipe engaging chain 12. On the opposite end of the head is formed a tapered slightly inclined nose 13 with which is adapted to be adjustably connected the opposite end of the chain after the latter has been passed around the pipe or other object to be turned. When thus arranged the head 11 will engage the stop or spacing lugs 6 on the jaws so that when the wrench is operated all of the strain will be applied to the jaws.

The inner end of the shank 10 is threaded and projects through a boss 14 formed on the inner end of the handle and with said boss 14 is revolvably engaged an adjusting ferrule or nut 15 having therein a threaded socket to receive the projecting threaded end of the shank whereby when said nut is turned in the proper direction the shank will be retracted and the chain thus tightened around the object with which the same and the jaws are engaged. In the ordinary use of the wrench a sufficient slack is given to the chain to permit either one or the other of the toothed edges of the jaws to be engaged with the pipe and the latter thus turned in either direction without removing and reversing the wrench, thus providing a double acting wrench.

The particular feature of improvement embodied in this wrench lies in the fact that the parts are so disposed and the links of the chain are of such size that ordinarily—especially when the teeth 8 are new and sharp—the head 11 may be placed in contact with the lugs 6 and the chain drawn over the pipe or other object to be turned and engaged with the nose 13 so tightly that a movement of the handle 1 in the proper direction will turn the pipe without necessarily adjusting the nut 15 at all, and the slack of the chain will be taken up by the teeth of the alligator jaws. When these teeth become a little dulled by constant use, however, it may be necessary to employ the nut 15, and after the chain has been ad-

justed with a certain link over the nose 13 the nut will have to be turned to draw the head a little downward from the lugs 6, after which the operation will be the same as above described, no matter in which direction the pipe is turned.

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 this invention as defined in the appended claim.

Having thus described my invention what I claim is:—

20 The herein described chain pipe wrench comprising a tubular handle, jaws secured to opposite sides thereof and provided with spacing lugs contacting with each other over the end of the handle, a bolt through said

lugs and jaws, a shank extending loosely 25 throughout the bore of the handle and having a cross head at its outer end with a nose at one extremity, both extremities of the head projecting laterally beyond said lugs, the jaws projecting longitudinally beyond 30 said lugs and having V-shaped recesses, with teeth therein facing outward, a chain connected with one extremity of said head, led thence past one extremity of the contacting lugs and around the object being gripped 35 by said jaws, and thence past the other extremity of said lugs, and having its links adapted to engage said nose, and a nut threaded on the other end of the shank against the inner end of the handle. 40

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

DE MONT CARYL.

Witnesses:

ROY BARCOCK,
H. A. MILLS.

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