

A. GAUNTT.

Improvement in Pipe-Wrench.

No. 132,571.

Patented Oct. 29, 1872.

Fig. 1.

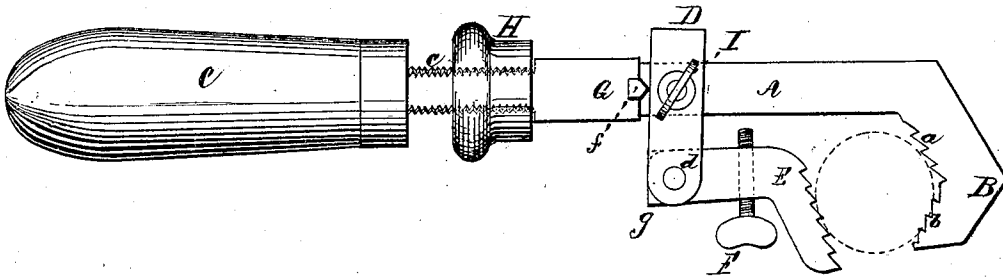
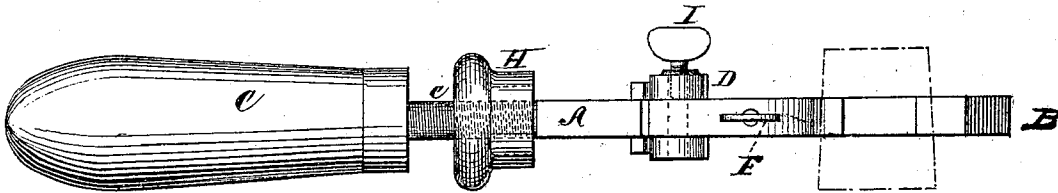


Fig. 2.



Witnesses:

Wm. J. Taylor.
S. M. Pool

Inventor:

Adin Gauntt.
By Attorney.
James L. Morris

UNITED STATES PATENT OFFICE.

ADIN GAUNTT, OF CHAGRIN FALLS, OHIO, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO IRVING W. POPE AND JOHN BLEASDALE, OF SAME PLACE.

IMPROVEMENT IN PIPE-WRENCHES.

Specification forming part of Letters Patent No. 132,571, dated October 29, 1872.

To all whom it may concern:

Be it known that I, ADIN GAUNTT, of Chagrin Falls, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Wrenches, of which the following is a specification:

The object of my invention is to improve that class of tools termed monkey or pipe wrenches, the chief purpose being to construct the same of few parts, in order to present them to the market and consumer at a reduced cost, the arrangement of parts being such that the instrument is rendered less complicated, the parts not liable to become injured by strain, and which parts are so combined as to produce a durable and powerful wrench, one which can be used with ease and facility, and that will be reliable and effective in operation. My invention consists in hinging or pivoting upon the adjustable slide which moves upon the stock of the wrench a boot-shaped jaw in such a manner that the same, by swinging upon its bearing in the arc of a circle, can be adjusted with respect to the stationary jaw formed on the stock of the wrench as to admit and grasp any ordinary-sized nut, pipe, or other article, the force applied upon the handle of the wrench when in operation being transmitted to the movable jaw, and then upon the slide, and it in turn to the stock of the wrench, said pressure being then arrested and confined, and not conveyed upon the nut or screw thimble that operates the movable boot-shaped jaw. The slide is connected with a sleeve in such a manner as to be moved toward or from the stationary jaw so as to increase or diminish the space between the two, its fixedness being controlled by a set-screw working through its wall and impinging the stock portion of the wrench. The swinging boot-shaped jaw is regulated in height with respect to the stock of the wrench and the stationary jaw by an adjusting-screw, the object of this arrangement being that the said swinging jaw can be made to retain a fixed position when operating upon articles of uniform size or diameter and especially designed to prevent crushing.

To enable others skilled in the art to make and use my improved universal wrench, I will

proceed to describe its construction and operation in detail.

In the drawing, Figure 1 is a side view of the improved wrench; and Fig. 2 is a longitudinal section of the same.

Like letters refer to like parts in both figures.

A designates the stock of the wrench, the front end of which is formed with the stationary jaw B, having the serrated faces *a b*, while the rear portion is provided with the screw-thread *c* and a handle, C, all of which are of the ordinary and well-known construction. Upon this stock A is secured a sliding collar, D, fitted so as to be advanced toward or from the stationary jaw B with ease and facility, and capable of being slightly rocked or canted for a purpose hereinafter mentioned. This sliding collar has one or more ears, *d*, to which is pivoted or hinged a boot-shaped jaw, E, the gripping face of which is serrated, preferably reverse to that of the jaw B, so as to insure a biting action when in contact with a nut, pipe, or other article to be operated upon. The sliding collar carries the boot-shaped jaw toward and from the stationary jaw, by which means the space between the two jaws is increased or decreased in order to admit and operate nuts, pipes, tubes, &c., of different sizes or shapes. The height of the boot-shaped jaw with respect to the stationary jaw or stock portion is regulated by an adjusting-screw, F, so that the position of the said jaw E, which is always free to swing on its axis, can be determined and gaged for operating articles of uniform size, and especially such as pipes, tubes, &c., the essential feature being to prevent crushing. The sliding collar D and the jaw E are both caused to advance toward and retreat from the stationary jaw by means of a sleeve, G, connecting the same with the adjusting-screw thimble H working on the screw-threaded portion *c* of the stock. The slide connection G surrounds the stock A on two or more sides, and is loosely connected with each side of the sliding collar D in any suitable manner, preferably as shown at *e e*, by which means the collar is drawn back, while from the connection H laterally extend the lugs or stops *f f*, against which the sliding collar D, when being advanced toward the stationary jaw, bears, said

stops acting also as fulcrums for the collar when pressure is exerted upon the swinging jaw, causing the top or bottom of the front end of said collar to bear upon the back of the stock, and thus not transmit pressure upon or strain the adjusting-nut or thimble H. To further effect this result the face of the stops contiguous to the sliding collar are made of rounding form, so that if the jaws be applied either in an upwardly or downwardly direction the bearing effect of the pressure exerted by the jaw on the collar will be communicated to and remain on the stock of the wrench while the operation of screwing or unscrewing is proceeded with.

To enable the pivoted boot-shaped jaw to be operated by the hand when it is not desired to remove the stationary jaw out of contact with the article being operated upon, the same is provided with an extension, *g*, so that by a simple pressure of the thumb it can be swung around or out of operating contact.

To enable the sliding collar to remain at any fixed point on the stock A so as to control and retain a uniform space between the

two jaws, I have arranged a set-screw, I, so as to pass through the wall of the collar and impinge upon the stock.

Having thus described my invention, I claim—

1. The sliding collar D, having projecting ear *d* and boot-shaped jaw E, in combination with the sleeve G, stock A and its jaw, the thimble H or set-screw I, substantially as herein shown and described.

2. The regulating-screw F for adjusting the swinging boot-shaped jaw E, in combination with each other and with the stock A, jaw B, sleeve G, and thimble H or set-screw I, as and for the purpose specified.

3. The sleeve G, provided with the lugs or stops *f*, for the purposes specified.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of October, 1872.

ADIN GAUNTT.

Witnesses:

JAMES L. NORRIS,
EDM. F. BROWN.