

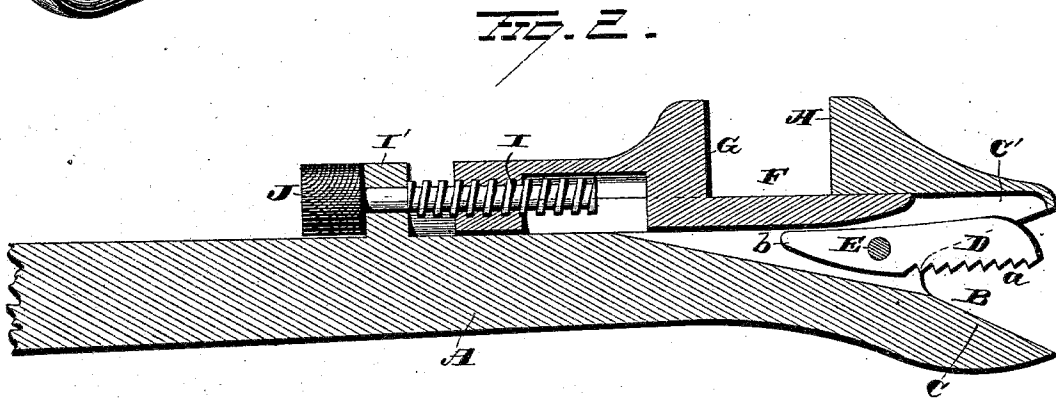
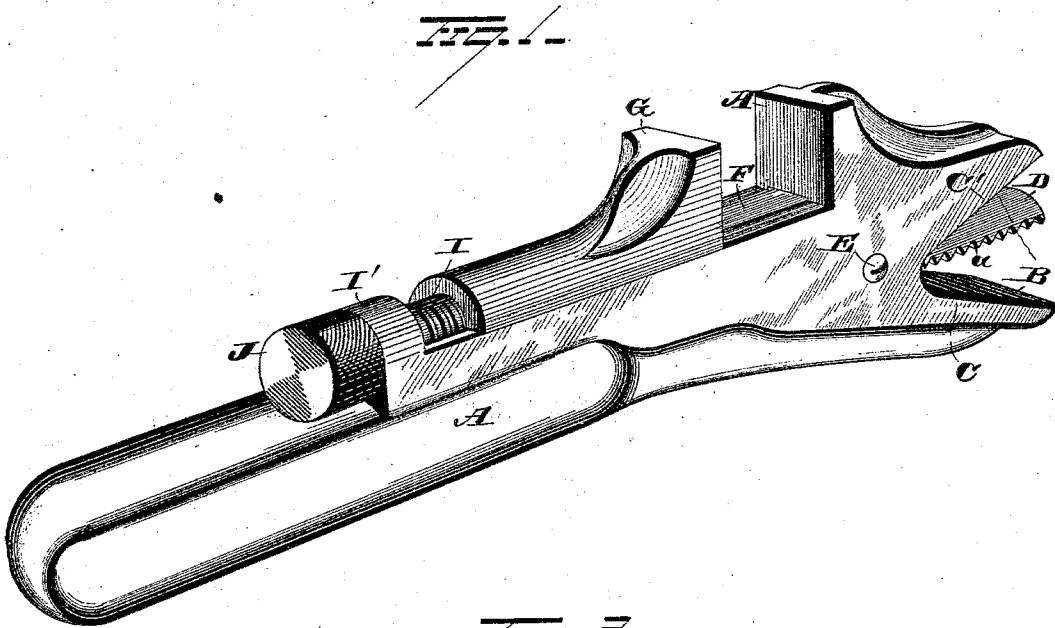
(No Model.)

J. G. MOOMY.

COMBINED NUT AND PIPE WRENCH.

No. 288,095.

Patented Nov. 6, 1883.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JOSEPH G. MOOMY, OF ERIE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO  
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## COMBINED NUT AND PIPE WRENCH.

SPECIFICATION forming part of Letters Patent No. 288,095, dated November 6, 1883.

Application filed September 20, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH G. MOOMY, of Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Combined Nut and Pipe Wrench; 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.

My invention relates to an improvement in combined nut and pipe-wrench, the object of the same being to provide a wrench of few parts, that will be convenient to operate and handle, and one that will combine simplicity and economy in construction with durability and efficiency in use; and with these ends in view my invention consists in the parts and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of my improved wrench, and Fig. 2 is a longitudinal sectional view of the same.

A represents the body of the wrench, made of metal, or metal with a wooden handle, and provided at its outer end with the V-shaped recess B, the side wall, C, of which is solid, and adapted to form one jaw of the pipe-wrench, while the opposite side wall, C', is hollow, for the reception of the pivoted jaw D, which latter acts in conjunction with the rigid jaw C. This pivoted jaw D is provided on its inner bearing-face with serrations or teeth *a*, which latter take into the pipe or rod, and near its rear end with an opening for the passage of the screw E, which latter pivotally secures the jaw D in position. This jaw is curved substantially as shown, and the trailing end *b* thereof rests within the hollow or socketed portion of the wrench-body. The wrench-body A is also provided on its face with the rigid jaw H, formed integral therewith, the rear face of which is smooth, and is adapted to act in conjunction with the sliding jaw G and form a nut-wrench. This sliding jaw G is provided with a female screw-threaded opening running longitudinally through it for the passage of the operating-screw I, which latter is swiv-

eled in the stud I', and provided on the outside of said stud with a milled wheel J, by means of which the screw is turned.

The sliding jaw G is provided at its outer end with the tongue F, the outer end of which is curved or beveled, so as to engage the outer or rear face of the pivoted jaw D. This tongue, which is preferably angular in cross-section, rests and moves within a suitable groove or gutter formed within the body of the wrench, and passes under the rigid jaw H and enters the hollow or socketed end, so as to engage the pivoted jaw D. The outer surface of the tongue rests flush or practically flush with the upper surface of the body A, so as not to interfere with the nut. This tongue, besides operating the pivoted jaw of the pipe-wrench, also assists materially in holding the sliding jaw of the nut-wrench in position.

These wrenches can be made of different sizes for different kinds of work.

The pivoted jaw of the pipe-wrench is, as before stated, situated within the V-shaped recess in the end of the body A. When the parts are opened to their greatest extent, the bearing-face of the said pivoted jaw rests slightly outside of the hollow jaw, and is then in position to operate, in the ordinary manner, on large pipe. When it is desired to use the wrench on smaller-size pipe, the milled wheel J is turned in the proper direction, which, through the intervention of the screw I, moves the sliding jaw of the nut-wrench. The tongue F, which is formed integral with or rigidly secured to the sliding jaw of the nut-wrench, necessarily moves therewith, and the beveled end thereof, being outside of the pivoted jaw of the pipe-wrench, is moved along until it passes the screw E, when it engages the pivoted jaw of the pipe-wrench and forces the latter over toward the rigid jaw.

From the foregoing it will be seen that by simply turning the screw I in one direction both movable jaws are forced simultaneously toward their respective rigid jaws, and by turning the screw in the opposite direction the movable jaw of the nut-wrench is moved away from its rigid jaw, and the movable jaw of the pipe-wrench is left free to fall back by gravity.

The pivoted jaw of the pipe-wrench is held in position by a single screw, and hence it can be easily removed and replaced by a new one when necessary.

5 This combined wrench can be made wholly of metal, of any suitable design and size; or it can be made of metal and wood, as found most desirable.

10 It is evident that slight changes and alterations in the construction and arrangement of the several parts might be resorted to without departing from the spirit of my invention; and hence I would have it understood that I do not confine myself to the exact construction shown and described, but consider myself at liberty  
15 to make such changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. In a combined nut and pipe wrench, the combination, with a body provided with two rigid jaws, one for a nut-wrench and the other

for a pipe-wrench, of a pipe-wrench jaw pivoted to the body, and an adjustable nut-wrench  
25 jaw constructed to engage and operate the pivoted pipe-wrench jaw, substantially as set forth.

2. In a combined wrench, the combination, with a body provided with two rigid jaws, a sliding jaw provided with a tongue or wedge,  
30 a movable jaw adapted to be moved by the wedge, and a screw for operating the sliding jaw, substantially as set forth.

3. In a combined nut and pipe wrench, the combination, with the body portion constructed  
35 with the rigid jaws C H and wall C', of the pivoted jaw D and the adjustable jaw G, provided with a wedge or tongue, F, substantially as set forth.

In testimony whereof I have signed this  
40 specification in the presence of two subscribing witnesses.

JOSEPH G. MOOMY.

Witnesses:

J. S. RILLING,  
S. A. DAVENPORT.