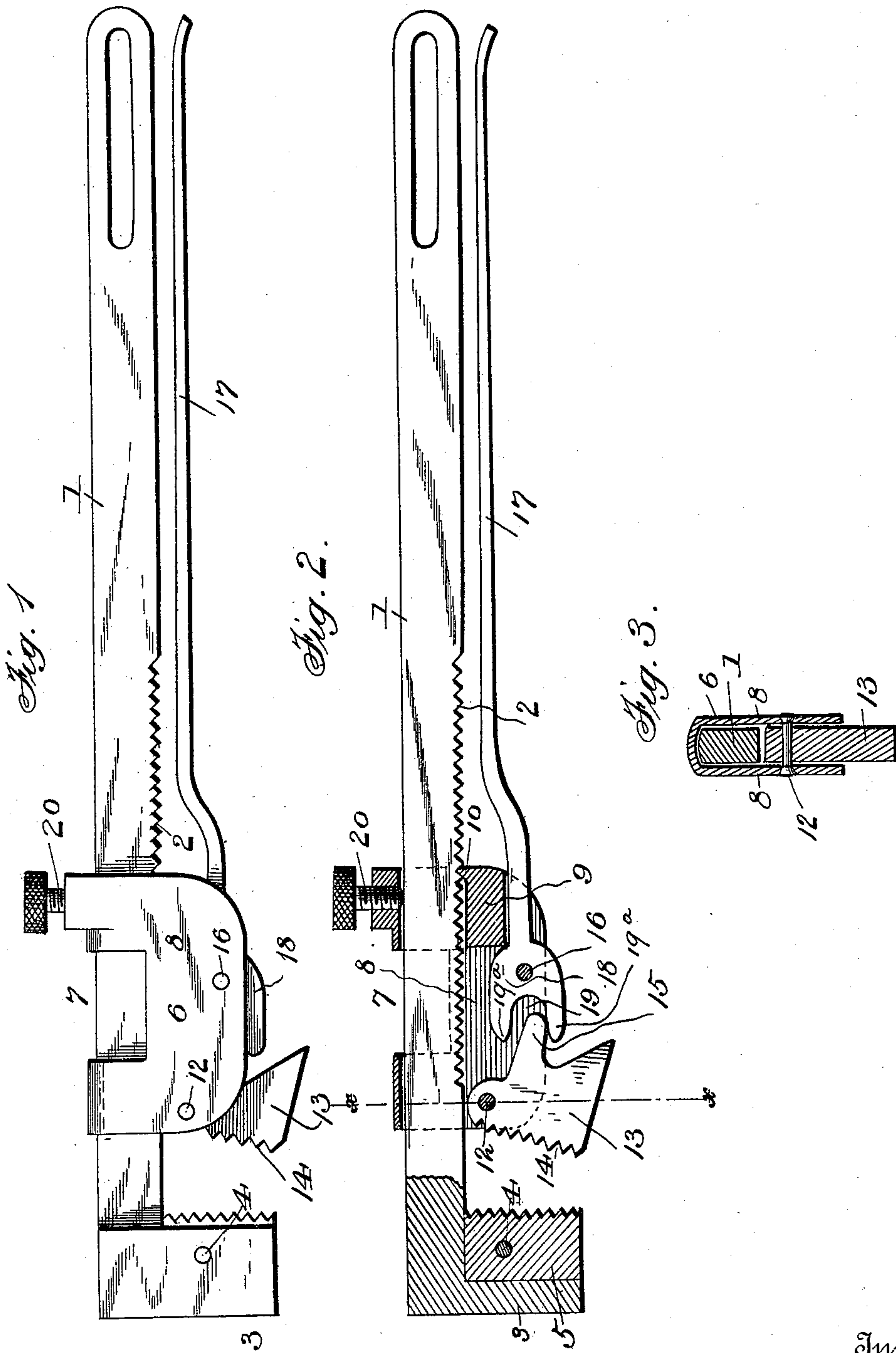


(No Model.)

J. C. BURGESS.  
PIPE WRENCH.

No. 583,699.

Patented June 1, 1897.



Witnesses:  
F. L. Ourand.  
J. L. Coombs

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Attorneys.



# UNITED STATES PATENT OFFICE.

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## PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 583,699, dated June 1, 1897.

Application filed April 30, 1896. Serial No. 589,635. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES C. BURGESS, a citizen of the United States, and a resident of Yountsville, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Pipe-Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in pipe-wrenches in which the movable jaw, after it has been moved forward to clamp a pipe between it and the stationary jaw, can be made to tightly grip or clamp the pipe, so as to prevent the jaws from slipping thereon.

The invention consists, essentially, in a wrench comprising a shank having rack-teeth on one edge and a stationary serrated jaw at one end, a slidable sleeve having a block provided with a tooth adapted to engage with said rack-teeth, a jaw pivoted to said slide and having teeth or serrations on the front side and a lug on the rear side, and a lever also pivoted to said slide, provided with a head formed with a curved recess, with which said lug engages, as hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a pipe-wrench constructed in accordance with my invention. Fig. 2 is a longitudinal section of the same. Fig. 3 is a cross-section on the line  $x x$ , Fig. 2.

In the said drawings the reference-numeral 1 designates the shank or handle of the wrench, provided on its inner edge with a number of rack-teeth 2 and at its outer end formed with a stationary jaw 3, the inner side of which is formed with a recess in which is seated a serrated block 5, held in place by a transverse rivet 4.

The numeral 6 designates a slide consisting of a metal plate bent over at the center and cut away at the bent-over portion, as seen at 7, forming walls 8. These walls at the rear end are connected together by a block 9, provided with a tooth 10, adapted to engage with the teeth of the shank. At the opposite end

the said sides are connected by a rivet 12, which forms the pivot for a jaw 13, having teeth or serrations 14 on its front side or edge and a rounded lug 15 on the rear side about midway between the top and bottom thereof. The rear end of the jaw 13 below the lug 15 is beveled, as seen in Fig. 2, to form a space for the lower lug of the lever hereinafter described to work in. The space between the said jaw and block and the inner surface or side of the bent portion of the slide forms a way for the shank of the wrench. Pivoted to a pin 16, secured to the side of the slide, near the lower edges thereof, is a lever 17, provided with a head 18, formed with a rounded recess 19, forming two lugs 19<sup>a</sup>, with which the lug of the pivoted jaw engages.

The numeral 20 designates a set-screw passing through the bent portion of the slide near the rear end and is adapted to bear against the shank, so as to force the teeth of the same into engagement with the tooth of the block.

The manner of using the wrench is as follows: The slide is slipped on the shank, which passes between the inner side of the bent portion of the former and the block and pivoted jaw. The teeth of the stationary jaw are then engaged with the pipe to be grasped and the slide slipped forward, so that the teeth thereof will also engage with the pipe, and the set-screw is tightened, so that the tooth of the block will engage with one of the teeth of the shank and thus hold the slide in place. The pipe will now be grasped between the two jaws, but not sufficiently tight for any practical purpose. To cause the pipe to be tightly clamped by the jaws, the lever is forced toward the shank, when the recessed head engaging with the lug of the pivoted jaw will cause the latter to be forced tightly against the pipe and the pipe be firmly grasped by said jaw.

By the above construction the slide can be quickly adjusted to pipes of varying diameters and the pipe firmly and tightly grasped or clamped between the jaws by the lever actuating the pivoted jaw.

Having thus fully described my invention, what I claim is—

In a pipe-wrench, the combination with the shank having rack-teeth on its inner edge

and formed with a stationary jaw at the outer  
end having a recess in its inner side, a serrated block seated in said recess and the transverse rivet, of the slide consisting of the  
5 metal plate bent over at the center forming two parallel sides and cut away between the ends, the rivets connecting said sides and lying in different vertical and horizontal  
10 planes, the connecting-block formed with a tooth, the serrated jaw pivoted to one of said rivets, having its rear side beveled and formed

with a rounded lug, the lever pivoted to the other rivet formed with a rounded recess and two lugs and the set-screw passing through the slide, substantially as described. 15

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES C. BURGESS.

Witnesses:

R. S. FULTON,  
HENRY WOOST.