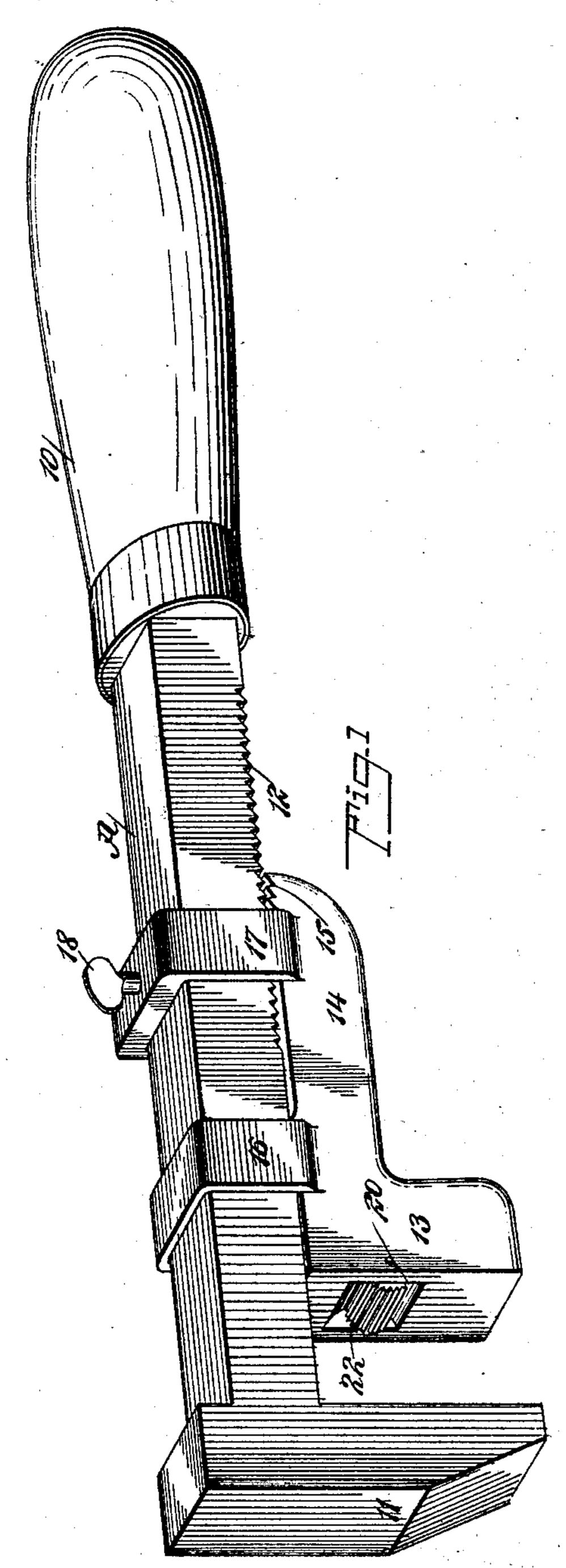
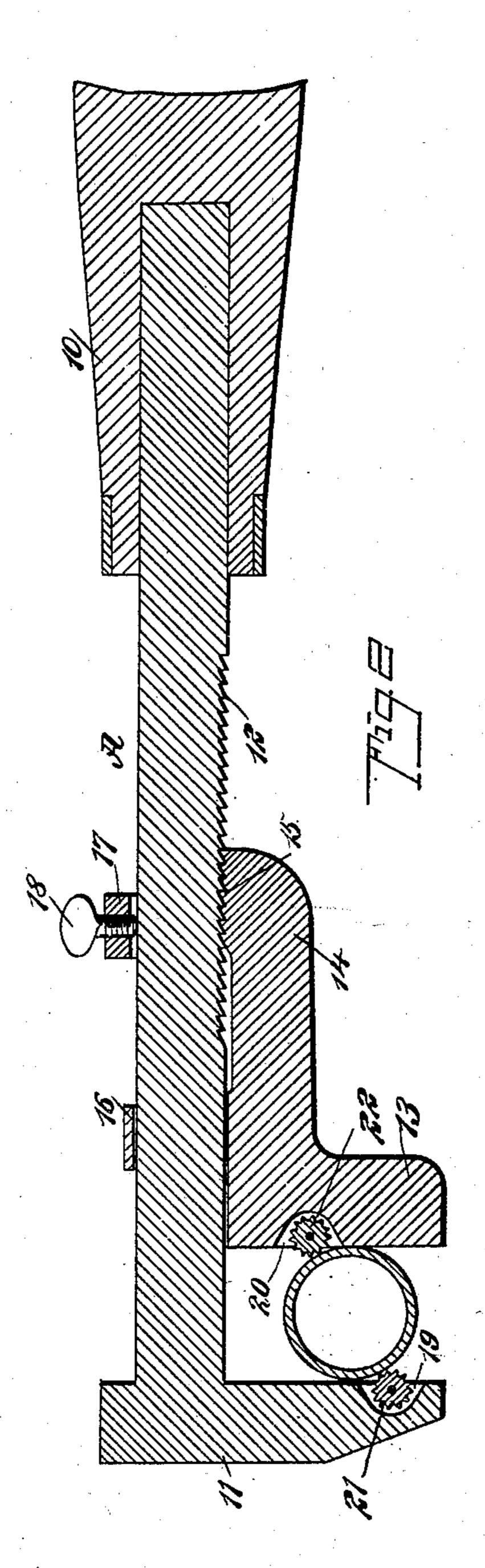
D. O. BRUNNER. WRENCH.

(Application filed July 14, 1900.)

(No Model.)





WITNESSES: J. H. 18. oply Medichen

INVENTOR

Janton O. Brienner

BY January

ATTORNEYS

United States Patent Office.

DANTON O. BRUNNER, OF SOMERSET, OHIO, ASSIGNOR OF ONE-HALF TO E. PEEBLES CLAYTON, OF SAME PLACE.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 666,083, dated January 15, 1901.

Application filed July 14, 1900. Serial No. 23,634. (No model.)

To all whom it may concern:

Be it known that I, DANTON O. BRUNNER, a citizen of the United States, and a resident of Somerset, in the county of Perry and State of Ohio, have invented a new and Improved Wrench, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a wrench which may be used as a pipe or a nut wrench, which will have simple and effective means of adjustment, and which will have corrugated or toothed roller-bearings in its jaws, so placed that when the wrench is in action said bearings will have gripping engagement with opposite sides of the article held within the jaws.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth,

20 and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a perspective view of the improved wrench, and Fig. 2 is a longitudinal

vertical section through the same.

A represents the shank of the wrench, which is provided at one end with a handle 10 and 30 at the opposite end with a fixed jaw 11, while at the front face of the shank A ratchet-teeth 12 are produced, the front faces of the teeth having an inclination in direction of the fixed jaw 11. A second jaw 13 is held to slide on 35 the shank A to or from the fixed jaw 11. This movable jaw is provided with a foot 14, which extends in the direction of the handle of the shank, and at the rear end of this foot ratchetteeth 15 are formed upon its inner face, said 40 teeth being adapted to engage with the teeth 12 on the shank A. Straps 16 and 17 are attached to the foot 14 of the movable jaw 13, and the shank A of the wrench moves freely through these straps. One strap, preferably 45 the lower strap 17, is provided with a setscrew 18 to engage with the rear face of the shank A, as shown in Fig. 2. When this setscrew is tightened, as illustrated in Fig. 2, the teeth of the foot-section of the movable jaw

are held in close locking engagement with the 50 teeth 12 of the shank; but when an adjustment of the movable jaw is to be made the set-screw 18 is loosened, whereupon the straps of the movable jaw may move along the shank A.

A cavity 19 is made in the inner or rear face of the fixed jaw 11, and a like cavity 20 is made in the outer or upper face of the movable jaw 13. These cavities are not in vertical alinement, one being in advance of the 60

other, as is clearly shown in Fig. 2.

A peripherally toothed or corrugated roller 21 is mounted to turn in the cavity 19, and a similar roller 22 is mounted to turn in the cavity 20 of the movable jaw 13. These roll-65 ers are adapted to engage with opposite sides of the pipe or nut or other article held between the jaws and serve to so grip the said article that it cannot slip while the wrench is being manipulated.

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

Patent—

In a wrench, the combination, with a shank having a fixed jaw at one end and ratchet- 75 teeth upon its forward face, of a movable jaw, both the inovable jaw and the fixed jaw having cavities in their opposing faces, a toothed foot connected with the movable jaw, the teeth of the foot being adapted for engage- 80 ment with the teeth on the shank, straps attached to the foot of the movable jaw, and through which the shank passes, a set-screw passed through one of the straps to an engagement with the shank, and rollers journaled in 85 the cavities of the two jaws, the said rollers having a roughened peripheral surface, a portion of said peripheral surface of the rollers extending beyond the faces of the jaws in which the cavities are made, as specified.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

DANTON O. BRUNNER.

Witnesses:

OWEN YOST, JOSEPH B. GROFF.