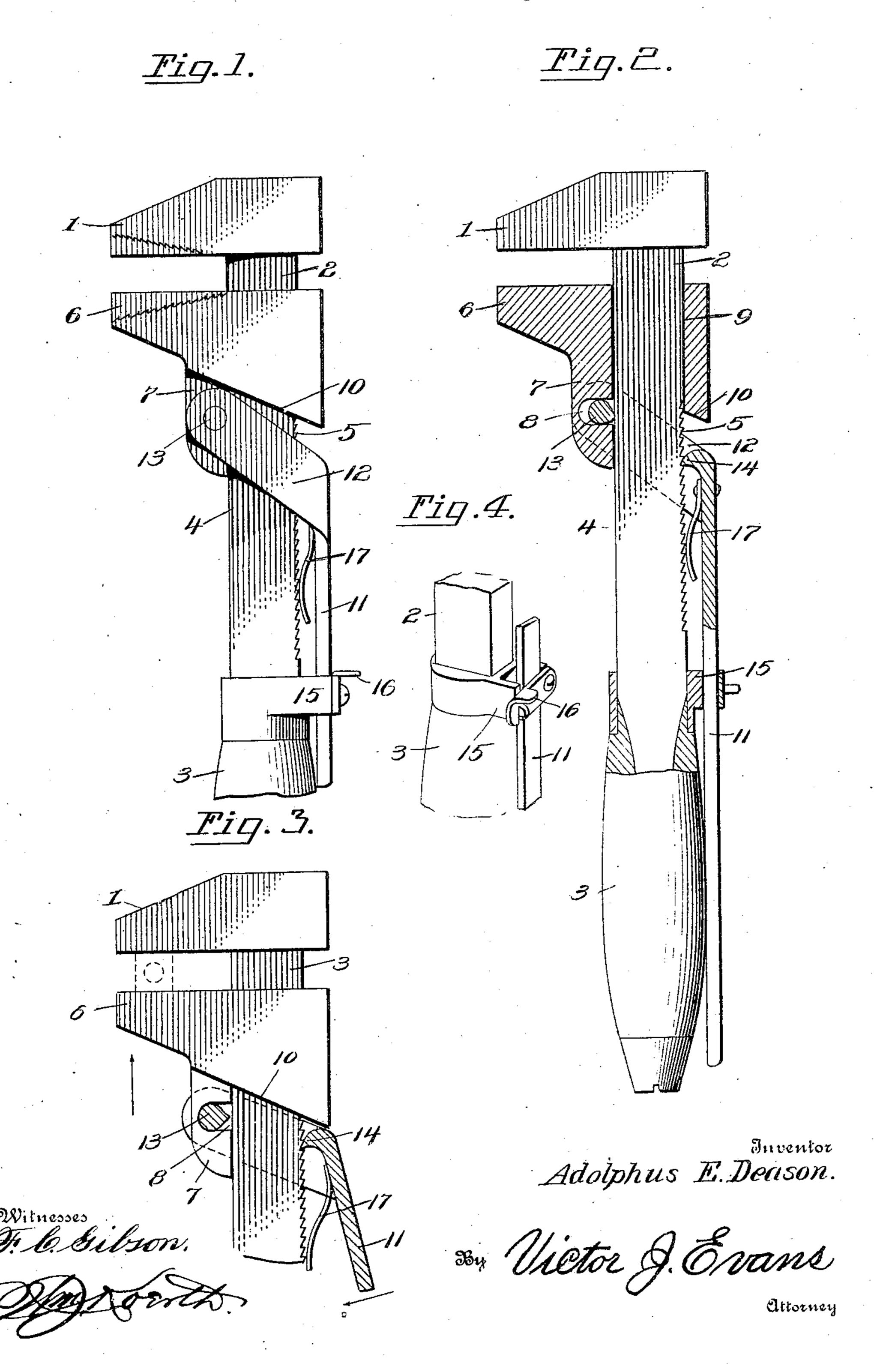
PATENTED JAN. 28, 1908.

No. 877,763.

A. E. DEASON. WRENCH.

APPLICATION FILED OCT. 23, 1907.



## UNITED STATES PATENT OFFICE.

ADOLPHUS E. DEASON, OF POTEAU, OKLAHOMA, ASSIGNOR OF ONE-FOURTH TO C. DIXON HILL, OF POTEAU, OKLAHOMA.

## WRENCH.

No. 877,763.

Specification of Letters Patent.

Patented Jan. 28, 1908.

Application filed October 23, 1907. Serial No. 398,807.

To all whom it may concern:

Be it known that I, Adolphus E. Deason, a citizen of the United States, residing at Poteau, district 14, Oklahoma, have in-5 vented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to improvements in wrenches.

The object of my invention is to provide a wrench of simple and durable construction, which may be quickly and easily adjusted and which will perform the function for which it is intended with accuracy and cer-15 tainty.

To these and other ends the invention resides in the novel construction of parts and their assemblage in operative combination as will hereinafter be more fully described and 20 claimed.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of my improved 25 wrench, showing the same in position for engaging a pipe or nut. Fig. 2 is a sectional view of the same. Fig. 3 is a partial sectional view of my improvement, showing the lever thrown out of engagement, and the 30 slidable jaw free to move, and Fig. 4 is a fragmentary view illustrating the lever securing latch.

My improved wrench may be adapted for use upon pipes or nuts and is provided with 35 the usual stationary jaw 1, either serrated for pipes as shown in the dotted lines or having the plain engaging face when adapted for nuts or bolts, as shown in the drawings. The stationary jaw 1 is provided with the shank 2 40 and the ordinary handle 3.

The shank 2 is provided with a series of teeth upon one of its faces, as at 5, incut or set with their outer ends even with the plane of the side of the shank 2, so that the engaging 45 tooth of the lever of the movable jaw will readily pass over them when this jaw is being adjusted.

The movable jaw 6 is provided with the

short shank 7 extending downwardly from 50 the jaw in direct line with the front face of the shank 2, the shank 7 is provided with a slot or cut-away portion 8 and the jaw 6 is connected with the shank 2 by the usual slot 9, and is provided with a lower inclined face 55 10, as clearly shown in the drawings. A lever 11, bifurcated at its upper portion so as to

provide the inclined arms 12, is adapted to be secured to the shank 7 of the movable jaw 6 through the medium of a tooth or rivet 13, engaging with the slot or cut-away portion 8 60 of the said shank.

The arms, tooth, and lever, are one solid piece, and between the inclined arms 12, the lever 11 is provided with the tooth 14, which when the jaws are in engaging position, is 65 adapted to engage with the teeth 5 of the shank 2 and to force the tooth or rivet 13 into engagement with the face 4 of the shank.

By referring to Fig. 3 of the drawings it. will be seen that when the movable jaw is 70 also slid into engagement with an object, the lever being at an angle and engaging one of the teeth, 5, the tooth engaged will act as a fulcrum point and the movable jaw will be forced more firmly against the object as the 75 lever is pressed towards the wrench. When the lever 11 is pressed in closed position the pointed edge of the tooth or rivet 13 bites against the front face of the shank 4 and the pointed edge of the tooth 14 bites the toothed 80 surface of the opposite face of the shank 4, the rivet 13 and the tooth 14 being connected by the same members and at an angle to each other a positive grip is secured upon the shank 4 and the sliding jaw 6 is securely 85 held in an immovable position by the rivet 13 and the tooth 14 of the lever 11.

In order to secure the jaws at any desired distance apart, I have provided the ferrule on the handle of my wrench with a pair of 90 projecting ears 15, suitably spaced apart for the reception of the lever 11, and have provided the same with a pivoted thumb latch 16 for securely retaining the lever in position.

A suitable spring 17 may be secured to the 95 inner face of the lever 11, and having its free end bearing against the teeth 5 of the shank, 2, will when the thumb latch 16 is disengaged serve to force the lever outwardly thus disengaging the tooth 14 of the shank.

While I have described the preferred embodiment of my invention minor details of construction may be resorted to without departing from the spirit or sacrificing any of its advantages.

Having thus described the invention, what is claimed as new, is:—

105

1. A wrench consisting of a stationary jaw having a main shank provided with teeth upon one of its faces, a slidable jaw provided 110 with a slotted shank, mounted upon said main shank, a lever provided with an engaging tooth and upwardly inclined bifurcated arms, the extremities of the arms being secured to the movable jaw through the medium of a tooth or rivet engaging within the slot of the shank, the tooth or rivet being adapted to engage with one of the faces of the main shank, while the engaging tooth of the lever engages the teeth upon the opposite side of the shank at a plane below that of the detent.

2. A wrench consisting of a stationary jaw having a main shank provided with teeth upon one of its faces, a slidable jaw provided with a slotted shank, mounted upon said 15 main shank, a lever provided with an engaging tooth and upwardly inclined bifurcated arms, the extremities of the arms being secured to the movable jaw through the medium of a tooth or rivet engaging within the 20 slot of the shank, the tooth or rivet being adapted to engage one of the faces of the main shank, while the engaging tooth of the lever engages with teeth upon the opposite side of the shank at a plane below that of the 25 detent, and means for retaining the lever in locked position.

3. A wrench consisting of a stationary jaw having a main shank provided with teeth

•

upon one of its faces, a slidable jaw having a slotted shank mounted upon the main shank, 30 a bifurcated lever having a tooth or rivet at its ends and an engaging tooth at the joining of the lever and the arms, the rivet being revolubly and slidably mounted within the slotted shank of the movable jaw and being 35 adapted to bite one face of the main shank when the lever is swung closed, the engaging tooth being positioned at an angle in relation to the plane of the rivet whereby the tooth acts as a fulcrum by engaging one of the 40 teeth upon the shank of the wrench when the lever is swung closed, thereby forcing the movable jaw tightly upon the object it engages and the tooth being adapted to bite against the toothed face of the shank when 45 in closed position, and means consisting of a spring whereby the lever is pressed outwardly so as to disengage the rivet and the retaining tooth from contact with the shank of the wrench.

In testimony whereof I affix my signature in presence of two witnesses.

ADOLPHUS E. DEASON.

Witnesses:

P. C. Bolger, Ted Goode.

.