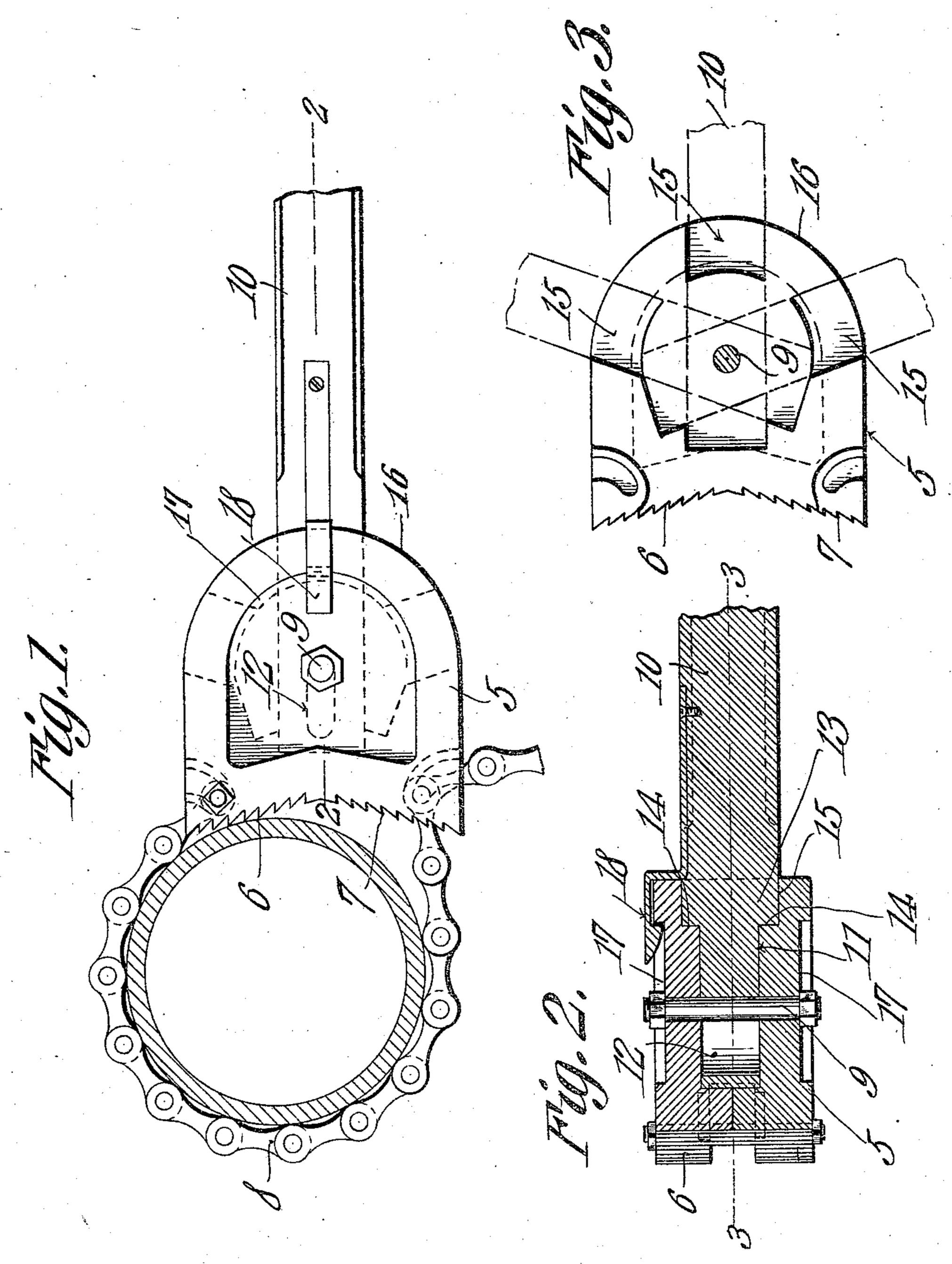
W. O. STANLEY.

WRENCH.

APPLICATION FILED JUNE 17, 1909.

944,468.

Patented Dec. 28, 1909.



Millian O. Startey.

Witnesses

UNITED STATES PATENT OFFICE.

WILLIAM O. STANLEY, OF ALLIANCE, OHIO.

WRENCH.

944,468.

Patented Dec. 28, 1909. Specification of Letters Patent.

Application filed June 17, 1909. Serial No. 502,771.

To all whom it may concern:

Be it known that I, WILLIAM O. STANLEY, a citizen of the United States, residing at Alliance, in the county of Stark and State 5 of Ohio, have invented a new and useful Wrench, of which the following is a specification.

This invention relates to that class of wrenches known as chain wrenches, and its 10 object is to provide an adjustable handle in order that the wrench may be used in close places, such as trenches, corners, or among other pipes, or in any places where a rigid handle does not permit of a long pull.

With the herein stated object in view, the invention consists in a novel construction and arrangement of parts to be hereinafter described and claimed, reference being had to the drawings hereto annexed in which—

Figure 1 is a plan view. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 2 with the handle shown in dotted lines in its various positions.

Referring to the drawings, 5 denotes a wrench head having a jaw face consisting of reversely toothed or serrated portions 6 and 7. The wrench head carries a chain 8 adapted to be passed around the pipe or 30 other work, and coöperating with the jaw faces to grip the same as is usual in this type of wrench. The chain is adjustably connected at one of its ends to the wrench head in order that it may be lengthened or 35 shortened and thus adjusted to the diameter of the work

To the wrench head is pivoted by a bolt 9 passing therethrough, a handle 10 of suitable length. The wrench head is in two super-40 posed pieces, spaced apart at their rear ends to form a slot 11 in which the pivoted end of the handle is received, and said end of the handle has a slot 12 extending longitudinally thereof through which the pivot 45 bolt 9 passes, the latter also serving to hold the two wrench-head sections together.

From a point adjacent to its pivot, the handle is thickened as indicated at 13 which forms a shoulder 14 on opposite sides of the 50 handle. This enlargement is adapted to seat in one of a number of recesses 15 made in opposite walls of the slot 11, and extending to the rear edge 16 of the wrench head at different angles. This edge is semicircular, 55 the center thereof being the pivot of the handle. The slot 12 is long enough to per-

mit the handle to be pulled lengthwise from the wrench head a sufficient distance to slip the enlarged portion 13 out of the recesses $1\overline{5}$.

One side of the wrench head has a depres- 60 sion 17 having a portion of its wall extending concentric to the aforesaid edge 16. This wall is engageable by a spring catch 18 carried by the handle, whereby the latter is locked against longitudinal movement. The 65 opposite side of the head is similarly formed in order that the handle may be inserted either side up.

One of the recesses 15 extends in alinement with the longitudinal axis of the 70 wrench head, and the other two recesses are set at an angle of about 72° thereto on op-

posite sides thereof.

The handle is set with respect to the wrench head by disengaging the catch 18, 75 and pulling said handle outwardly from the wrench head until the enlargement 13 is out of the recesses 15. The handle is now free to be swung around on its pivot, and it is brought into alinement with the desired 80 recess, and then pushed forwardly to bring the enlargement into said recess, whereupon the handle is locked to the wrench head against swinging on its pivot. The catch 18 also snaps over the edge of the depression 17, 85 and locks the handle against movement in the direction of its length. It will be noted that when the handle is in operative position, the thrust is borne by the opposite side walls of the recess, and not placed on the 90 pivot 9.

As already stated, the herein described wrench is designed primarily for use in close places. The handle may be set in the first angular position, and the work turned as 95 far as possible. Then, with the jaws still retaining their grip, the catch 18 is raised, and the handle is slipped to the central position and the work then given another partial turn. With the jaws still holding the 100 work at the initial point of grip, the handle is now slipped into the second angular position, and another partial turn made. It is therefore possible to give the work three partial turns without readjusting the jaws. 105 The wrench may be placed on the work to pull or turn it one way, and also to pull it the opposite way without taking the wrench off.

What is claimed is:

1. In a wrench, a head having a depression on one side, and also being formed with

a slot having recesses extending at different angles, a handle pivotally mounted in the slot, and movable lengthwise with respect to its pivot, said handle having an enlarged portion movable into and out of the recess, and a catch carried by the handle and engageable with the edge of the aforesaid depression for locking the handle against the aforesaid longitudinal movement.

2. In a wrench, a head having a series of recesses, a handle pivotally connected to the head, and movable lengthwise with respect to its pivot, said handle having an enlarged

portion movable into and out of the aforesaid recesses, and means for locking the handle against said longitudinal movement, comprising a catch carried by the handle, and a shoulder on the head engageable thereby.

In testimony that I claim the foregoing 20 as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM O. STANLEY.

Witnesses:

JOHN T. ALEXANDER, J. D. PENNELL.