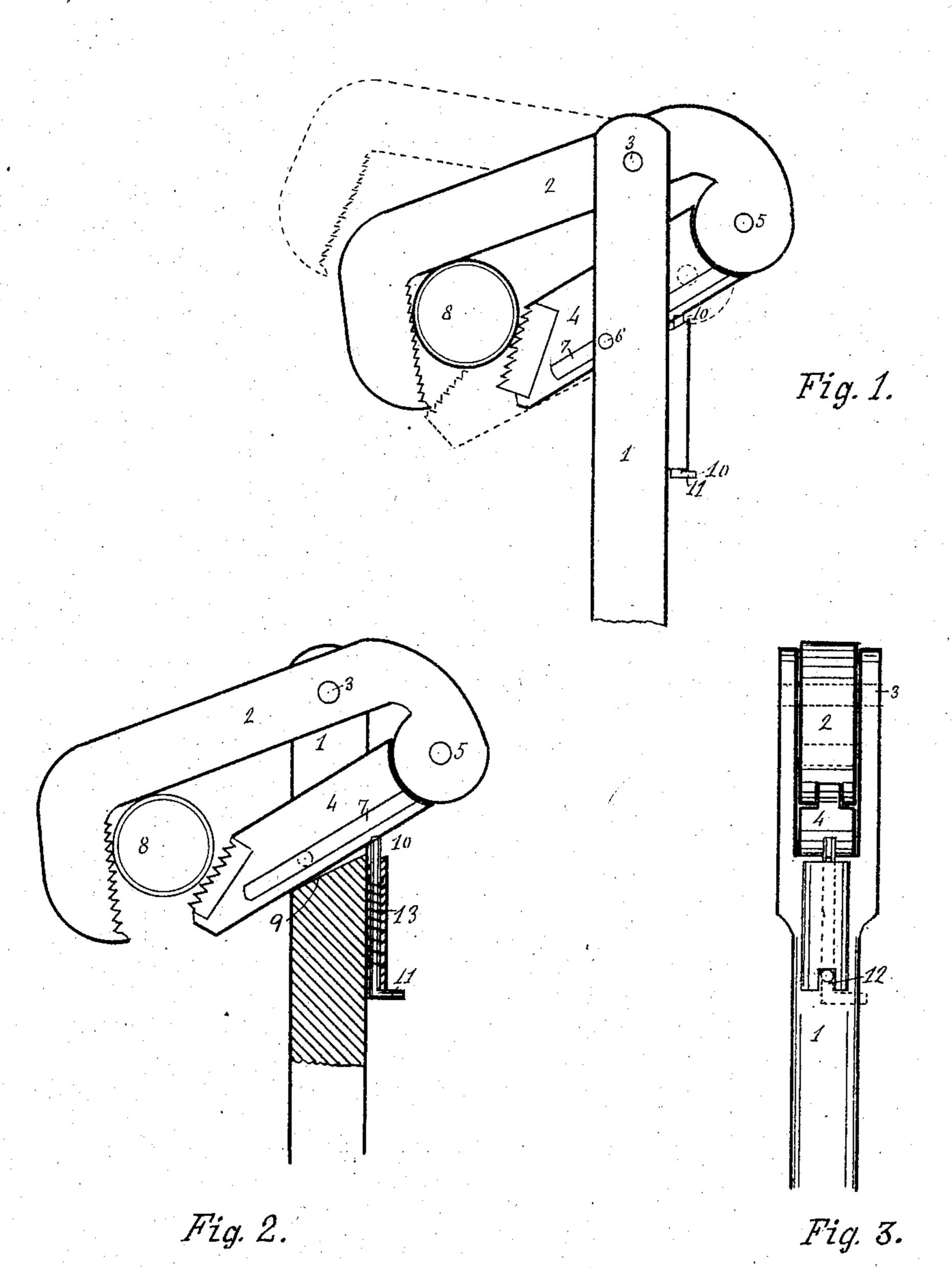
J. D. NOYES. PIPE WRENCH.

APPLICATION FILED MAR. 7, 1903.

NO MODEL.



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JESSE D. NOYES, OF SHAMBURG, PENNSYLVANIA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 772,576, dated October 18, 1904.

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To all whom it may concern:

Be it known that I, Jesse D. Noyes, a citizen of the United States, residing at Shamburg, in the county of Venango and State of 5 Pennsylvania, have invented a new and useful Improvement in Pipe-Wrenches, of which

the following is a specification.

My invention relates to wrenches used in connecting and disconnecting pipes in differ-10 ing positions, as oil or gas pipes, where the wrench is required to be used in horizontal, vertical, or inclined positions, and the pipes are of varying diameters, my object being to make a wrench that can be applied to pipes 15 in all positions and to many of the varying sizes; in short, to make one wrench do the work that has heretofore required several; also, to provide a device by which the wrench may be locked on the pipe and left as long as 20 desired. I attain this end by the device as illustrated in the accompanying drawings, in which—

Figure 1 is a view of the wrench as applied to the pipe and also showing in dotted lines 25 the position of the parts with the jaws thrown open, as when released from the pipe; Fig. 2, the same as Fig. 1, but with one side of the fork or handle removed to show the parts covered; and Fig. 3, a view of the ends of the 3° jaws and handle to more clearly show the

locking device.

In the several views the same parts are in-

dicated by the same numerals.

1 is the handle or lever, the extension of 35 the free end not being shown. This lever is forked, as shown in Fig. 3, to pass on both sides of the jaws 2 and 4.

2 is a jaw hinged to the lever by the pin 3. This jaw is shaped substantially as shown, 4° and with a second jaw 4 hinged to it by the pin 5. Both of the jaws pass between the sides of the fork on the lever 1 and have free motion between the sides, except that the jaw 4 is controlled by a pin 6 in the handle moving 45 in the groove 7 in the jaw.

8 represents the pipe on which the jaws are

closed and gripping.

In Fig. 2 is shown the shoulder 9 at the bottom of the fork of the handle, which is fitted 5° to bear against the under side of the jaw 4 in

all positions and relieve the heavy strain which would otherwise come upon the pin 6. The pin is only useful in holding the jaw

against the shoulder 9.

To lock the parts of the wrench in any de- 55 sired position, either wide open or against any size pipe, there is placed on one side of the handle 1 a bolt 10, preferably inclosed, but shown in section in Fig. 2. This bolt is fitted to slide up and engage with recesses in the 6c under side of the jaw 4, thus holding the jaw from sliding back and forth through the handle, thus locking all parts of the wrench. This bolt is bent at the bottom 11 for convenience of work, and in the lower end of the 65 case 10 is the recess 12, fitted to receive the bent end 11. When adjusted to enter the recess 12, a spring 13 forces the bolt 10 up to engage with the jaw 4 and lock the wrench. By drawing down the bolt and turning it to 70 either side it is held back and leaves the wrench free.

The operation is as follows: The wrench, wide open, as shown by the dotted lines in Fig. 1, is placed around the pipe and the jaws 75 closed, bringing the jaws 2 and 4 in contact with the pipe, and by pressure to the left on the lever the serrated surfaces clutch the pipe firmly. Then, if desired, the bolt 10 is turned to the proper position and by the action of 80 the spring 13 is thrown up, engaging with the jaw 4. The wrench is then securely fast on the pipe and may be left alone. To disengage it, withdraw the bolt, turn the handle to one side of the slot 12, when it is held back, 85 the handle 1 moved to the right, and the wrench removed.

I claim as my invention—

1. A pipe-wrench; consisting of the handle or lever 1, forked as shown, and having 90 hinged to it the jaw 2, with the jaw 4 hinged to the jaw 2; both jaws playing through the fork in the lever, the jaw 4, resting against the bottom of the fork and being controlled by the pin 6, in one fork of the handle play- 95 ing back and forth in the groove 7, in the jaw 4; all working in combination substantially as shown and described.

2. A pipe-wrench; consisting of the forked handle 1, the jaws 2, and 4, formed and con- 100 nected as shown, the jaw 4, bearing against the bottom of the fork and controlled by the pin 6, in the handle plying in the groove 7 in the jaw 4, and with the locking device of the bolt 10, fitted to engage with the under side of the jaw 4; all the parts working in combination as shown and for the purpose herein described.

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In testimony whereof I have signed my name to this specification in the presence of two sub- 10 scribing witnesses.

JESSE D. NOYES.

Witnesses:

H. A. Howland, Chas. R. Church.