W. EBERHARD.

PIPE-WRENCH.

No. 189,615. Patented April 17, 1877.

Fig. 1.

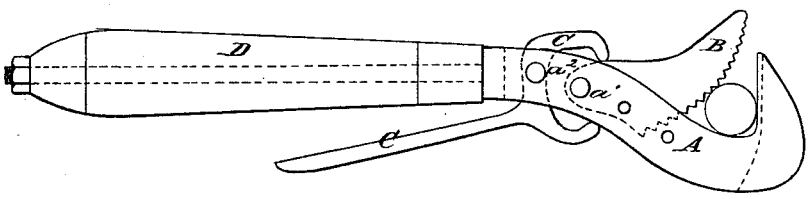


Fig. 2.

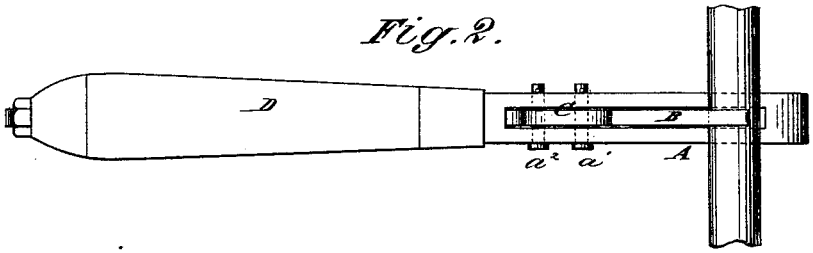
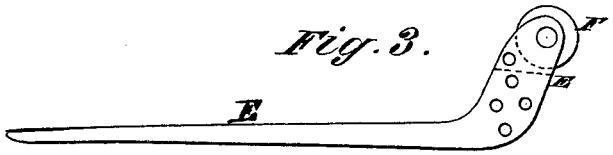


Fig. 3.



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IMPROVEMENT IN PIPE-WRENCHES.

Specification forming part of Letters Patent No. **189,615**, dated April 17, 1877; application filed March 19, 1877.

To all whom it may concern:

Be it known that I, WILLIAM EBERHARD, of Akron, in the county of Summit and State of Ohio, have invented a new and useful Improvement in Pipe-Wrench, of which the following is a specification:

Figure 1 is a side view of my improved wrench. Fig. 2 is a top view of the same. Fig. 3 is a detail side view of a cutter to be used with the wrench.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved wrench designed especially for turning pipes, but which may be used with advantage for turning and holding bolts and various other objects, and which shall be simple in construction and convenient and effective in use, grasping objects of various sizes and shapes with equal firmness.

The invention consists in an improved pipe-wrench formed of the stationary jaw projecting forward nearly at right angles, and formed upon the outer end of a rearwardly-inclined slotted shank, the detachable and adjustable pivoted jaw, made cam-shaped and with graduated teeth, the pivoted forked lever, and the handle, constructed and combined with each other, as hereinafter fully described; and in the lever having its forward end bent upward, and a number of pivot-holes formed in it, and having a rotary cutter pivoted to its slotted forward end, in combination with the slotted shank of the stationary jaw of the wrench, as hereinafter fully described.

A is the stationary jaw of the wrench, which projects forward nearly at right angles, and the shank of which inclines rearward with a gentle curve, as shown in Fig. 1. The shank of the jaw A is slotted longitudinally to receive the movable jaw B, and has a number of holes formed through it to receive the pin a', by which the said movable jaw is pivoted to it, so that the jaw B may be adjusted as the size of the object to be held may require.

The face of the jaw B is made cam-shaped, and has teeth formed upon it, which teeth gradually increase in fineness toward the outer end, so that the larger objects will be held by the larger teeth.

C is a forked lever, the upper prong of which passes up through the rear part of the slot in the shank of the jaw A, and is pivoted in place by a pin, a^2. The ends of the prongs of the lever C are curved inward to rest against the opposite edges of the movable jaw B a little in front of the pivot a^2. The handle of the lever C extends back along the handle D of the wrench, so that it may be operated by the fingers of the hand that grasps the handle of the wrench to move the jaw B to or from the object to be held. E is a lever, the forward end of which is bent upward to pass through the rear part of the slot in the shank of the jaw A, and has a number of holes formed through it to receive the pivot a^1. The forward end of the lever E is slotted to receive the circular cutter F.

With this construction, by detaching the jaw B and lever C, and attaching the lever E, the instrument may be used for cutting off pipes.

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

1. An improved pipe-wrench formed of the stationary jaw A, projecting forward nearly at right angles, and formed upon the outer end of a rearwardly-inclined slotted shank, the detachable and adjustable pivoted jaw B, made cam-shaped, and with graduated teeth, the pivoted forked lever C, and the handle D, constructed and combined with each other, substantially as herein shown and described.

2. The lever E, having its forward end bent upward, and a number of holes formed in it, and having a rotary cutter, F, pivoted to its slotted forward end, in combination with the slotted shank of the stationary jaw A of the wrench, substantially as herein shown and described.

WILLIAM EBERHARD.

Witnesses:

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