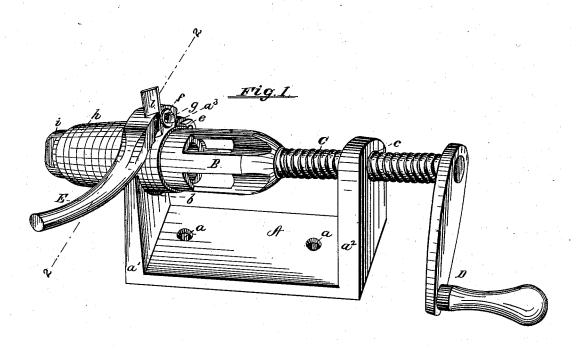
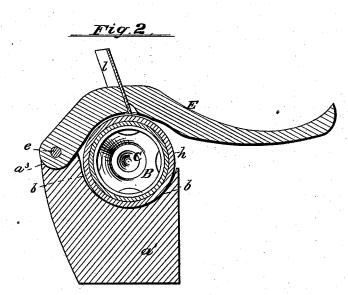
## G. L. MILLER.

Machine for Trimming Circular-Valves.

No. 216,966.

Patented July 1, 1879





Witnesses

awfof

W.R. Edilen

Inventor
George Lo. Miller
By his attorney
James & Boyce

## UNITED STATES PATENT OFFICE.

GEORGE L. MILLER, OF ROUSEVILLE, PENNSYLVANIA.

## IMPROVEMENT IN MACHINES FOR TRIMMING CIRCULAR VALVES.

Specification forming part of Letters Patent No. 216,966, dated July 1, 1879; application filed October 4, 1878.

To all whom it may concern:

Be it known that I, G. L. MILLER, of Rouseville, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Trimming Standing Valves for Oil-Wells; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 represents a perspective view of my improved valve-trimmer. Fig. 2 is a transverse section of the same, taken through line 2 2 of Fig. 1.

My invention consists of improved devices for trimming or shaving standing valves as used in oil-wells.

It also consists of a simple, yet novel, method of feeding and operating the same simultaneously by a single screw-threaded shaft.

A represents a cast-iron bed, having boltholes a a, for securing to any convenient support when operating the same. It is also provided with standards  $a^1$   $a^2$ , cast solid, and forming part of bed A.

Standard  $a^{l}$  has a concave bearing, b, forming a seat or bearing for the reception of the revolving valve B. The opposite standard,  $a^{2}$ , is provided with an opening therein, c, forming a nut, for the reception of screw-shaft C. Said shaft is secured to valve B by a beveled threaded opening, and operated by a handcrank, D.

The rear edge of standard  $a^1$  is bowed outwardly, as represented in Fig. 2, for additional strength, and provided with an ear,  $a^3$ , for the reception of bolt e, thus forming a fulcrum for hand-lever E. Said lever E is provided with a concave face, having a steel cutter or scraper, l, for reducing said valve B. Said cutter is placed askew in hand-lever E, and secured in said lever by a washer, f, held securely in place by a bolt-head, g.

In operating my improved cutter I bolt it securely to some convenient support. Then

cutting the leather rings or washers h in the ordinary manner, I place them on the valve, and bolt them securely on the same by means of the nut i. I then place said valve B in its concave seat b, screwing the same on the screwshaft C sufficiently to secure it. Grasping lever E with my left hand, I hold it firmly pressed down on the leather washers h. Then, revolving screw-shaft C with the right hand by means of the hand-crank D, the valve B is revolved, and at the same time propelled forward by the screw-shaft operating in nut c, forming part of standard  $a^2$ . As the valve revolves, the cutter in lever E trims the leather washers in a smooth and even manner.

There are several ways for trimming valves. The general way is to place the valve in a lathe and turning it sufficiently until it fits the working-barrel. Another, yet very crude, method of trimming the valve is to use a woodrasp, reducing the same until the proper size is attained.

There are a great many objections to both ways of reducing valves. The first method is the best; but the valve must be continually removed from the lathe to try it in the working-barrel, the operator at the well losing valuable time in going to and fro in operating the same on a lathe.

With my improved device there is no such serious objections as previously explained, as the trimmer can be on hand at every well, and operated so easily a child can handle it properly.

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

The combination of a frame, A, having a standard,  $a^2$ , provided with a feeding-screw shaft, C, and a concave bearing-standard,  $a^1$ , with a concave lever pivoted to the standard  $a^1$ , and provided with a cutter set at an acute angle to the axis of the feeding-screw and held, in the manner shown and described.

GEORGE L. MILLER.

Witnesses:
JAMES C. BOYCE,
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