

I. O. SAILOR.
Stump-Extractor.

No. 198,817.

Patented Jan. 1, 1878.

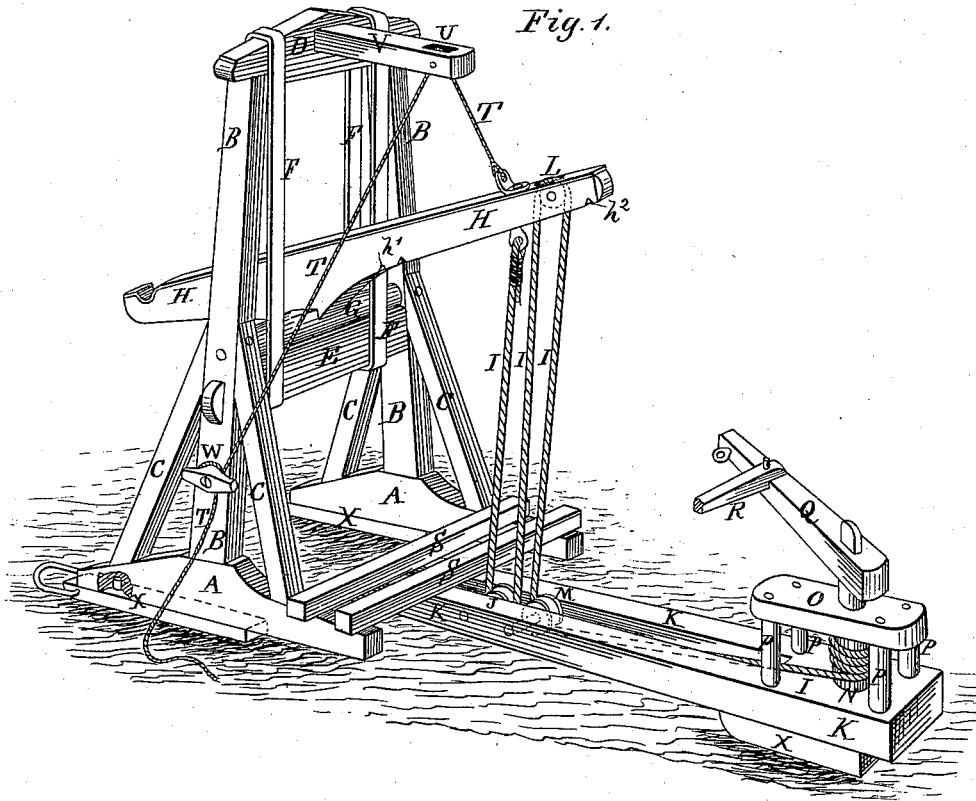
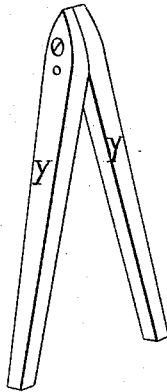


Fig. 2



WITNESSES:

Henry N. Miller
J. N. Scarborough.

INVENTOR:

I. O. Sailor.
BY *Munn & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ISAAC O. SAILOR, OF MONTGOMERY CITY, MISSOURI.

IMPROVEMENT IN STUMP-EXTRACTORS.

Specification forming part of Letters Patent No. **198,817**, dated January 1, 1878; application filed November 8, 1877.

To all whom it may concern:

Be it known that I, ISAAC O. SAILOR, of Montgomery City, in the county of Montgomery and State of Missouri, have invented a new and useful Improvement in Stump-Pullers, of which the following is a specification:

Figure 1 is a perspective view of my improved machine. Fig. 2 is a detail perspective view of the prop.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine which shall be simple in construction, convenient in use, and powerful in operation, which may be easily mounted upon wheels for transportation, and may be easily and quickly moved from place to place.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A are two sills, to the middle parts of which are attached the lower ends of two posts, B. The posts B are strengthened in an upright position by inclined braces C, the upper ends of which are attached to the opposite sides of the said posts, and their lower ends are attached to the sills A. To the upper ends of the posts B is attached a cross-bar, D, and to their middle parts is attached a second cross-bar, E. The bar E is strengthened against the strain that may be placed upon it by two bands, F, which pass around it and around the upper cross-bar D, so that a part of the strain may be thrown upon the said cross-bar D.

The upper side of the cross-bar E is concaved longitudinally to receive the shaft G, the ends of which are pivoted to the posts B, and to the center of which is securely attached the lever H.

Upon the upper side of the end of the forward or short arm of the lever H is formed a notch to receive the chain attached to the stump to be pulled. To the lower side of the rear or long arm of the lever H is attached, by an eyebolt or other suitable means, the end of a rope, I, which passes down and around a pulley, J, pivoted to and between

the rear sills K, passes up and around a pulley, L, pivoted in a slot in the rear end of the lever H, passes down and around a second pulley, M, pivoted to and between the rear sills K, and passes back and is attached to the capstan N.

The capstan N is pivoted to the rear end of the sills K and to a block, O, connected with said sills by short posts P. To the upper end of the capstan N is attached the sweep Q, to which the horse is attached, and to which is also attached the lead-bar R. The forward ends of the rear sills K are attached to two cross-bars, S, the ends of which are attached to the rear ends of the forward sills A.

To the upper side of the rear part of the lever H is attached the end of a rope, T, which passes over a pulley, U, pivoted in a slot in the rear end of the bar V, the forward end of which is securely attached to the cross-bar D. The rope T is designed for use for raising the rear end of the lever H, and holding it raised while its forward end is being connected with the stump to be pulled. The free end of the rope T is secured, while holding the rear end of the lever H raised, by being passed around a belaying-cleat, W, attached to one of the posts B.

Beneath the forward parts of the forward sills A and the rear parts of the rear sills K are placed runners X, which are pivoted near their forward ends to said sills, so that they will always adjust themselves in line with the direction in which the machine is being moved.

In using the machine one of the horses is attached to the sweep Q, and the other to one of the forward runners X, so that when one stump has been pulled and detached the machine may be drawn to the next stump by the said horses without its being necessary to hitch or unhitch them.

Y is a V-shaped prop, which, when the machine is to be taken from one place to another, is placed beneath the lever H in the rear of its fulcrum, with its end in a notch, *h*¹, the rear end of said lever having been previously raised. Then, by turning the capstan by hand,

or by drawing down upon the rope I, the forward end of the machine will be raised, so that wheels can be readily placed beneath it. The lever H is then raised, the prop Y is placed in the notch h^2 in the rear end of the lever H, and the rope I again drawn upon, which raises the rear end of the machine, so that wheels can be placed beneath it.

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

The combination of the straps F with the cross-bars D E and the posts B, for supporting the lever H against downward pressure, substantially as herein shown and described.

ISAAC O. SAILOR.

Witnesses:

CHARLES P. EVERED,
JABEZ H. PEVELER.