

E. FARNSWORTH.
Stump-Extractor.

No. 215,513.

Patented May 20, 1879.

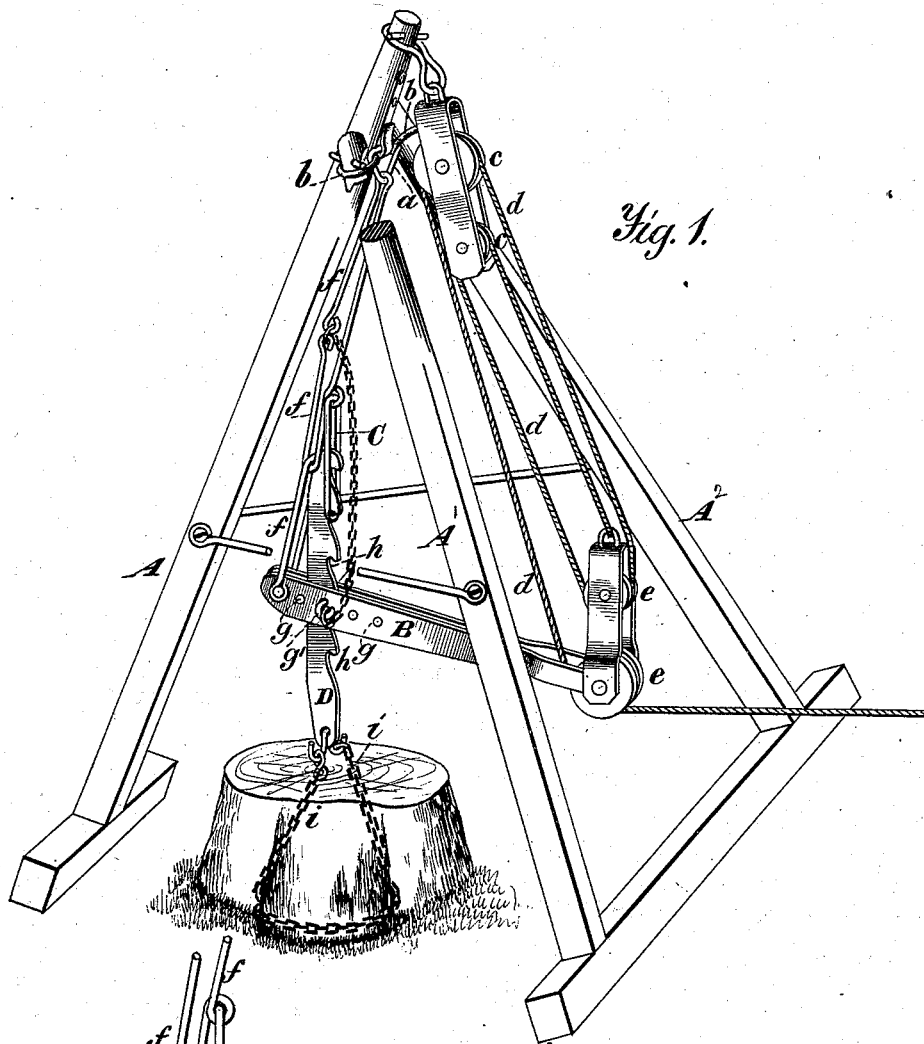


Fig. 1.

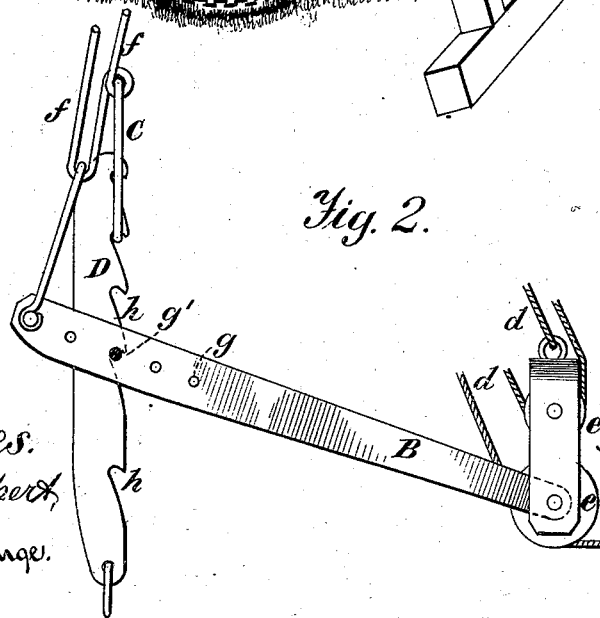


Fig. 2.

Witnesses.
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per
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UNITED STATES PATENT OFFICE.

ENOCH FARNSWORTH, OF BELL TOWNSHIP, JEFFERSON COUNTY, PENNSYLVANIA, ASSIGNOR TO HENRY FARNSWORTH, OF DYSART, IOWA.

IMPROVEMENT IN STUMP-EXTRACTORS.

Specification forming part of Letters Patent No. **215,513**, dated May 20, 1879; application filed January 30, 1879.

To all whom it may concern:

Be it known that I, ENOCH FARNSWORTH, of Bell township, in the county of Jefferson and State of Pennsylvania, have invented certain new and useful Improvements in Stump-Extractors; 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, and in which—

Figure 1 is a perspective view of my improved stump-extractor, and Fig. 2 is a detail side view of the lifting-bar and its co-operating lever and link.

The same part in the two figures is designated by the same letter.

This invention appertains to certain improvements in stump-extractors, the object of which is to expedite the pulling or extracting of the stump, and to lessen the labor and time in adjusting the lifting bar or lever at different stages of the extracting of the stump; and it consists in the employment of a notched or toothed lifting bar or lever, in connection with an adjusting-lever and link, adapted for co-operation substantially as hereinafter more fully set forth.

In the accompanying drawings, A A¹ A² refer to a number of uprights, forming a tripod, with their upper ends connected together by a triangular or other shaped ring, *a*, strapped to one of said uprights, and connecting with two other rings, *b b*, one fastened to each of the other two uprights. From the extreme upper end of one of these uprights is suspended a block of pulleys, *c c*, preferably two in number, and around which pass ropes *d d*, passing around a similar block of pulleys, *e e*, to the free end of which ropes the pulling power is applied in any form practicable.

B is an open lever, with one end hung or articulated upon the axis of one of the pulleys *e*, and the other end hung by means of

links or a chain, *f*, from the ring *a*. This lever is provided with a series of adjusting-perforations, *g g*, and a pin, *g'*, which may be suspended in any known way from the chain *f*.

C is a link depending from the chain *f*, or looped into one of its links, as shown. This link C is hung some distance above or from the lever B, and its function will be seen hereinafter.

D is the lifting bar or lever, adapted to be placed in between the two parts of the lever B, and provided with a number of notches or teeth, *h*, and a chain, *i*, which fastens around the stump to be extracted.

The operation of my extractor will be understood from the following: The bar or lever D being in place between the parts of the lever B, and hung upon the pin *g'*, adjusted to the desired perforation *g*, its chain *i* will be fastened around the stump to be extracted, when the power is applied to the rope or ropes *d*, causing the tightening and the pulling of the chain *i* upon the stump, partly excavating it, and the elevating of the notched lifting bar or lever D into contact with, and so as to automatically hook into the link C, by which the said lever, with its partially-extracted stump, will be held in an elevated position, while the pulling power can be slackened and the lever B lowered. This being done, the pin *g'* is adjusted to the coincident notch of the bar or lever D, and power again applied, when, as the lever B is thus being elevated, the bar D, with its stump, will be further elevated or entirely extracted, should the leverage be sufficient, and the coincident notch in the upper end of the bar D caused to hook upon the link C, and thus effect the suspending of the extracted stump. The stump can now be lowered into a cart or other vehicle and be carted away.

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

1. In a stump-extractor, the combination of the open lever B and its pin *g*, and link C,

chain *f*, and lifting-bar D, substantially as shown and described.

2. The combination of the tripod A A¹ A², ring *a*, pulleys and rope or ropes *c e d*, chain *f*, link C, lever B, pin *g'*, and lifting bar or lever D, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ENOCH FARNSWORTH.

Witnesses:

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E. E. LEWIS.