

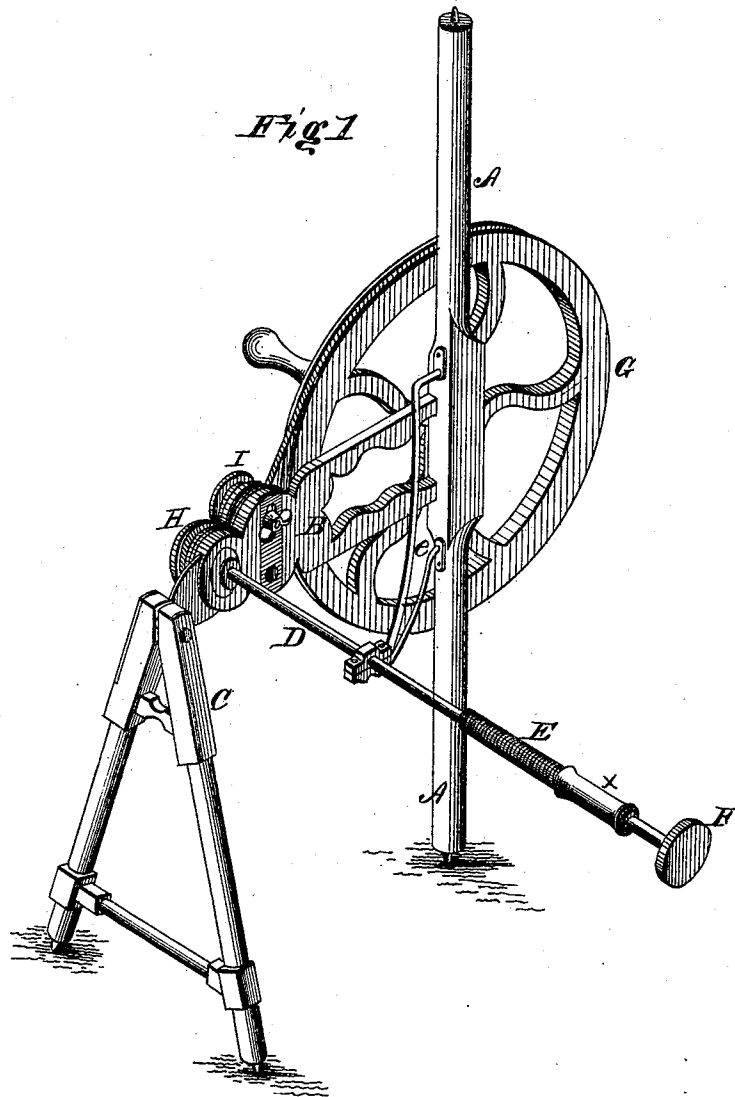
2 Sheets—Sheet 1.

L. B. EDMONDS & C. V. KENYON.

HORSESHOE CALK-SHARPENER.

No. 178,748.

Patented June 13, 1876.



WITNESSES
Frank L. Ourand
Henry N. Miller

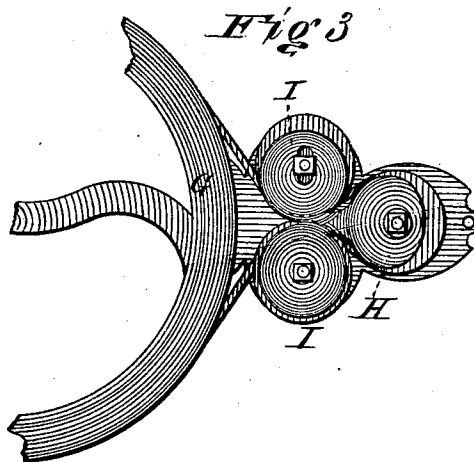
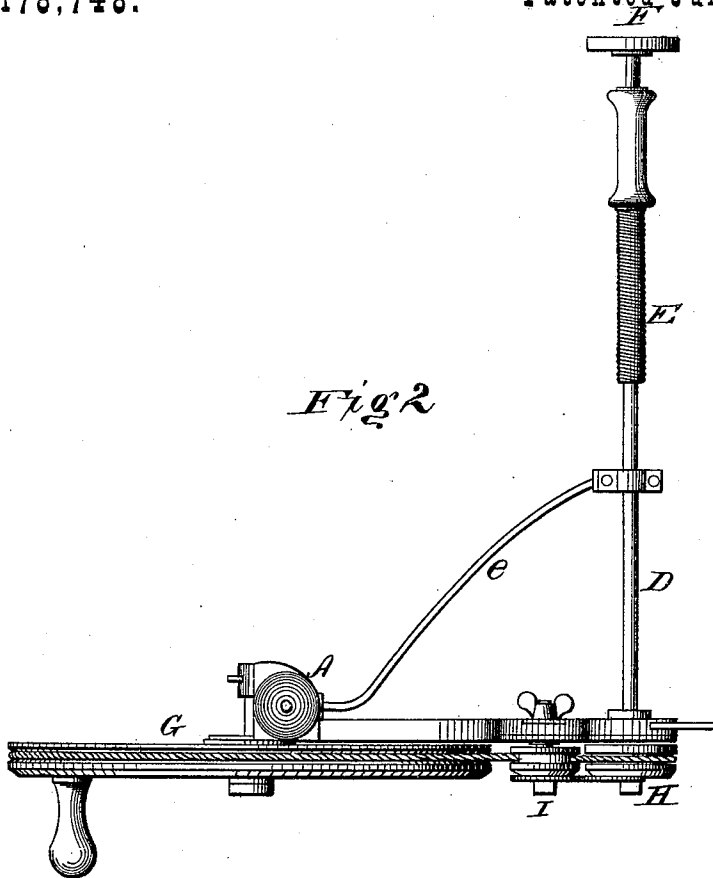
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UNITED STATES PATENT OFFICE.

LEONARD B. EDMONDS AND CORNELIUS V. KENYON, OF SOUTH GLENS FALLS, NEW YORK.

IMPROVEMENT IN HORSESHOE-CALK SHARPENERS.

Specification forming part of Letters Patent No. 178,748, dated June 13, 1876; application filed April 15, 1876.

To all whom it may concern:

Be it known that we, LEONARD B. EDMONDS and CORNELIUS V. KENYON, of South Glens Falls, in the county of Saratoga and in the State New York, have invented certain new and useful Improvements in a Machine for Sharpening the Calks of Horseshoes without removal of shoes from the feet, and for other analogous purposes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to machines for sharpening the calks of horseshoes, and for analogous purposes; and consists, essentially, of suitably-mounted driving-wheel, a flexible shaft, and a grinding tool on the extremity thereof, and also in details of construction hereinafter more fully described.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a plan, and Fig. 3 a section, of the same, showing the construction and relative arrangement of the parts.

A represents a standard, having an arm, B, projecting therefrom, and preferably from about the middle thereof. At the extremity of the arm B is pivoted the supporting-frame or legs C. Upon the standard A is mounted a driving-wheel, G, and upon the arm a pulley, H, which is connected with a shaft, D. Tightening-pulleys I I are also arranged upon the arm B, as shown. A suitable brace, e, extends from the standard and serves as a support for the shaft D.

Upon the end of the shaft D we connect a flexible portion, E, consisting in this case of tightly-coiled wire; but it may be made of any suitable flexible material. Outside of the flexible part E we have a suitable wooden or other sleeve, by which the operator may control and move the grinding device F in any manner desired.

It is obvious that the grinder F may be either stone, an emery, a sand, or other grinding-wheel.

With a machine of this character calks may be ground without the removal of the

shoe from the horse's foot, thus preventing, to a large extent, the destruction of the hoof, otherwise inevitable when the shoe has to be removed.

By having the arm B project from near the middle of the standard, and by having the legs C pivoted, the standard may be used either end up, and the arm project either to the right or left, and the machine work either right or left handed, as may be desired.

It is obvious that gear or friction wheels may be used in place of a band and pulley, as in this case. It is also obvious that by the use of geared wheels (internal and spur) the entire mechanism may be mounted upon the standard alone.

This machine may be driven by hand or other power, as may be desired.

It is also obvious that a drill or bit of any kind may be connected to the end of the flexible shaft, and thus a boring or drilling machine provided adapted for various purposes and positions inaccessible with other machines.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with suitable driving mechanism, of a flexible shaft, and grinding wheel or bit, substantially as and for the purposes set forth.

2. The standard A, arm B, and pivoted legs C, constructed as described, forming a reversible frame, in combination with a grinding mechanism supported thereon, whereby the same may be used as a right or left hand machine, as set forth.

3. The combination of the standard A, arm B, driving-wheel G, pulley I, shaft D, flexible part E, and tool F, the combination being and operating substantially as described.

In testimony that we claim the foregoing we have hereunto set our hands and seals this 29th day of February, 1876.

LEONARD B. EDMONDS. [L. S.]

CORNELIUS V. KENYON. [L. S.]

Witnesses:

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BYRON LAPHAM.