R. DENHOLM.

HORSESHOE CALK SHARPENER.

No. 188,868. Patented March 27, 1877.

Fig. 1.

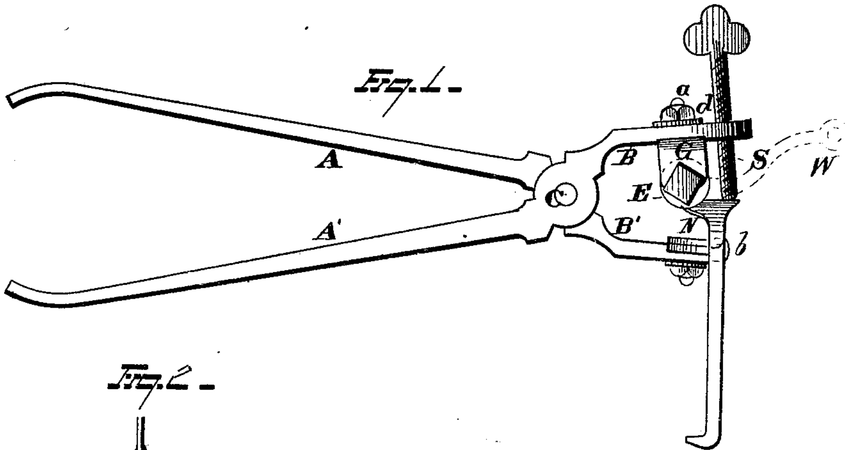

Fig. 2.

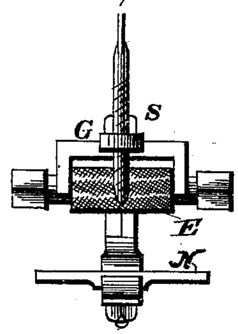

Fig. 3.

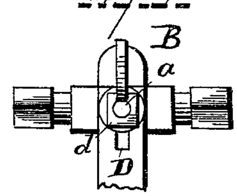

Fig. 4.

WITNESSES

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ROBERT DENHOLM, OF CLEVELAND, OHIO.

IMPROVEMENT IN HORSESHOE-CALK SHARPENERS.

Specification forming part of Letters Patent No. **188,868**, dated March 27, 1877; application filed February 26, 1877.

To all whom it may concern:

Be it known that I, ROBERT DENHOLM, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Horseshoe-Calk Sharpeners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to horseshoe-calk sharpening-machines; and consists in the combination of parts, as hereinafter specified and claimed.

In the drawing, Figure 1 represents a side view of a device embodying my invention, with a horseshoe in position. Fig. 2 is a top view of the same, showing how the cutter is journaled. Fig. 3 is a view of the outside face of one of the parts, showing how the cutter may be adjusted. Fig. 4 is a perspective view of the cutter.

The object of my invention is the construction of a calk-sharpening machine which can be applied to the horseshoe without removing the same, which can perform its work quickly and effectually, and can be removed instantly from the shoe.

In the drawing, A A′ and B B′ represent, respectively, the arms and jaws of a pair of tongs, pivoted together at C. Each of said jaws is provided with a slot, D, and jaw B′ has, in addition, formed on its end a hook, *b*. To jaw B′ is fastened a two-armed bracket, G, which can be adjusted up and down on the jaw by means of a slot in the same, and is secured in any desired position by a screw, *a*, and nut *d*. In the arms of said bracket is suitably journaled the cutter E of cylindrical shape, and provided with any effective cutting-surface, but preferably constructed with a file-surface.

Both ends of the shaft of the cutter are squared, so that a crank, by which to rotate the cutter, may be applied to either end.

To jaw B′ is fastened the bearing-plate N in the same manner as the bracket is secured to jaw B, and said plate is also adjustable by means of the slot in the jaw and a screw and nut.

Through the upper end of jaw B passes the regulating-screw S, which presses against the outer edge of the horseshoe, near the clip of the same, and is intended to regulate the amount of cutting to be effected by the cutter.

The operation of the device is as follows: When the foot of the horse has been lifted the hook *b* of jaw B is so placed as to rest against the inner edge and on the upper face of the horseshoe, as indicated in the drawing. The quarters of the shoe then rest on the bearing-plate N. The operator now presses the arms A A together, so that the cutter E bears against the outside of the toe-calk, as shown in Fig. 1, and adjusts the regulating-screw S. The crank W is then turned and the cutter revolves and cuts the calk to a sharp edge.

The cutter is held to the calk by pressing together the arms A A′, and the screw S may be adjusted as often as desired or necessary.

The reason for making the cutter and bearing adjustable is to adapt the device to shoes of different heights and sizes, and to enable the cutter to be applied to any desired locality.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a pair of tongs, of a revolving cutter, journaled in an adjustable bracket, substantially as and for the purpose set forth.

2. The combination, with a pair of tongs, provided with a bearing-plate, N, of a revolving cutter journaled in an adjustable bracket, substantially as and for the purpose set forth.

3. The combination, with a pair of tongs, provided with an adjustable bearing-plate, N, of a revolving cutter journaled in an adjustable bracket, substantially as and for the purpose set forth.

4. The combination, with a pair of tongs, provided with an adjustable bearing-plate, N, of a revolving cutter journaled in an adjustable bracket and an adjusting-screw, S, the latter arranged in the extreme end of the

upper jaw, substantially as and for the purpose set forth.

5. The combination, with a pair of tongs, one jaw of which has a hook, *b'*, formed thereon, of a bearing-plate, N, and a revolving cutter, journaled in an adjustable bracket, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT DENHOLM.

Witnesses:
FRANCIS TOUMEY,
WM. BEHRENS.