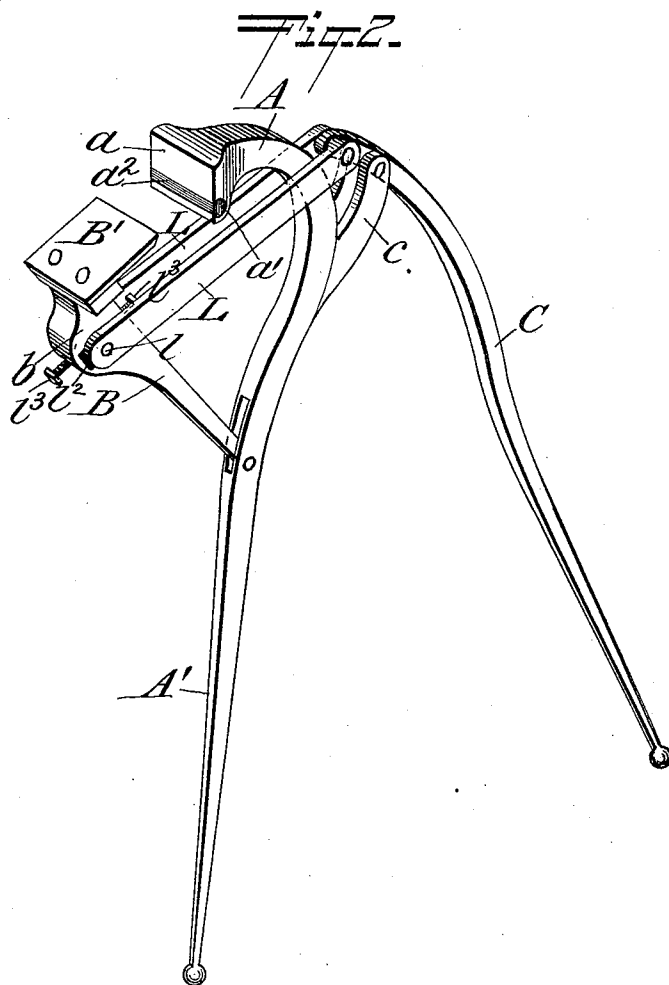
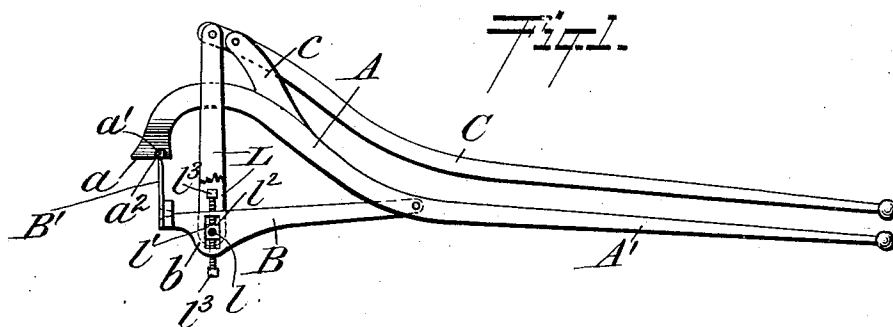


(No Model.)

W. K. FRALEY.
HOOF TRIMMER.

No. 511,885.

Patented Jan. 2, 1894.



Attest:

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UNITED STATES PATENT OFFICE.

WILLIAM K. FRALEY, OF LEBANON, INDIANA.

HOOF-TRIMMER.

SPECIFICATION forming part of Letters Patent No. 511,885, dated January 2, 1894.

Application filed March 29, 1893. Serial No. 468,232. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM K. FRALEY, a citizen of the United States, residing at Lebanon, in the county of Boone and State of Indiana, have invented certain new and useful Improvements in Hoof-Trimmers, of which the following is a full, clear, and exact description, such as will enable those skilled in the art to which they appertain to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

The invention relates to improvements in hoof-trimmers of that class in which a pair of jaws are respectively provided with an anvil-block and a knife and the means for operating the said jaws.

It has for its object the provision of such a device as will be of simple, light and cheap construction, and efficient in its purpose.

It also has for its object the construction of an anvil-block which will not dull the cutting edge of the knife blade by reason of the same coming in contact with the said block.

Further, it has for its object the construction of a system of operating levers and connections whereby the anvil-block can be firmly held in place against a hoof without being liable to displacement by the operation of the knife.

The invention consists in forming in the face of the anvil-block a circular groove and in seating in the same a piece of soft metal to form a surface for the knife to cut against, the soft metal being removable.

It also consists of an anvil jaw made integral with the main handle of the implement, of a knife jaw pivoted to the main handle, of an operating lever pivoted to the knife jaw and of a link connecting the end of the operating lever beyond its pivotal point with the anvil jaw.

The invention further consists in the novel construction, combination and arrangement of parts such as will be hereinafter more fully described, pointed out in the appended claims and illustrated in the accompanying drawings.

In the accompanying drawings, in which similar letters of reference designate corresponding parts, Figure 1 is a side elevation

of a hoof-trimmer embodying the invention, and Fig. 2 is a perspective view of the same.

Referring to the drawings by letter, A designates the main jaw of the implement. It is substantially semi-circular in form and is made integral with the main handle A'. The free end of the jaw is T-shaped and forms the anvil *a* against which the knife cuts. In the face of the anvil-block a circular groove *a'* is formed, passing longitudinally through the same. In this groove a soft piece of metal *a²*, such as copper, brass, Babbitt metal, &c., is seated. The position of the metal is such that the knife-edge will cut against the same and thereby be preserved to a great extent. When the exposed surface of the soft metal becomes impaired the latter can be withdrawn, turned and replaced and thereby present a new surface to the knife-edge. This can be repeated a number of times until the entire surface of the metal has been destroyed, when it can be replaced by a new piece. In this way the cutting edge of the knife can be easily and cheaply protected.

The knife jaw B consists of a piece of metal, the preferable shape of which is that shown in the drawings, of which the enlargement *b* is an essential feature, pivoted at an end to the main jaw near the junction of the latter with the main handle A'. The free end of the jaw is also substantially T-shape in form and has secured thereto in any suitable manner the blade B' in such a position that when the two jaws are brought together the edge of the blade will impinge upon the soft metal inserted in the face of the anvil-block.

C designates the operating lever. It has substantially the same form and construction as the lever A' and the anvil jaw A to within a short distance of the end of the latter. It is pivoted to the end of the offset *c*, which projects from the anvil jaw and is bifurcated for the reception of the lever. By means of this offset the operative lever can be fulcrumed very near its end, whereby a much greater leverage is secured than would be if the lever should be pivoted directly to the main handle A' as in the latter case the pivotal point would have to be much nearer to the junction of the lever with the anvil jaw in order to allow the proper movements of

the two handles. In this way too, the construction is simplified as the two levers can be given substantially the form with the exception of the anvil-block on the main one, and further if the two levers should be directly pivoted together, to obtain the best results, one of them would have to be recessed, which would be a somewhat costly operation. In the present instance such a recess is not necessary while the same result is obtained.

The operative lever is adjustably connected with the knife jaw by the links L, L. Each of these links is pivoted at an end to the end of the operative lever projecting beyond its pivotal point and at the other end by the pin l to the block l' . There is a link on each side, the operating lever, the anvil and knife jaws being between them. The block l' is rectangular in form and is mounted in the socket l^2 formed in the enlarged portion b of the knife jaw B, and is adjustably held therein by the set-screws l^3, l^3 . The object in having the connection adjustable between the operating lever and the knife jaw is to secure the proper relative movement of the two levers, for if there were no such connection, as the knife became shortened by sharpening the two levers would finally come together and not perform their functions properly.

The operation of the device is as follows: The hoof to be operated upon is placed in the proper position and the implement is so held as to bring the anvil block against the periphery of the hoof and is firmly held there by the handle A'. The knife is then moved

toward the anvil block, by means of the operating lever C and the connecting links, to remove the surplus portion of the hoof. It is to be observed that in this operation there is no tendency to displace the anvil by the movement of the operating lever as the whole movement is confined to the latter and its immediate connections. It is also to be observed that the operator will have but two levers in his hand and by them the operation can be performed quickly and carefully.

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

1. In a hoof-trimmer, the combination of the jaws, the knife and anvil-block respectively connected with the same, the said anvil-block having a circular groove formed in its face, and the soft metal removably seated in the said groove, substantially as described.

2. In a hoof trimmer, the combination of the main handle, the anvil jaw formed integral with the same, the knife jaw pivoted to the said handle, the block adjustably mounted in a socket formed in the said knife jaw, the operating lever pivoted to the main handle, and the links connecting the operating lever with the block mounted in the knife jaw, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WM. K. FRALEY.

Witnesses:

G. M. D. POMERY,
JOHN B. HARRISON.