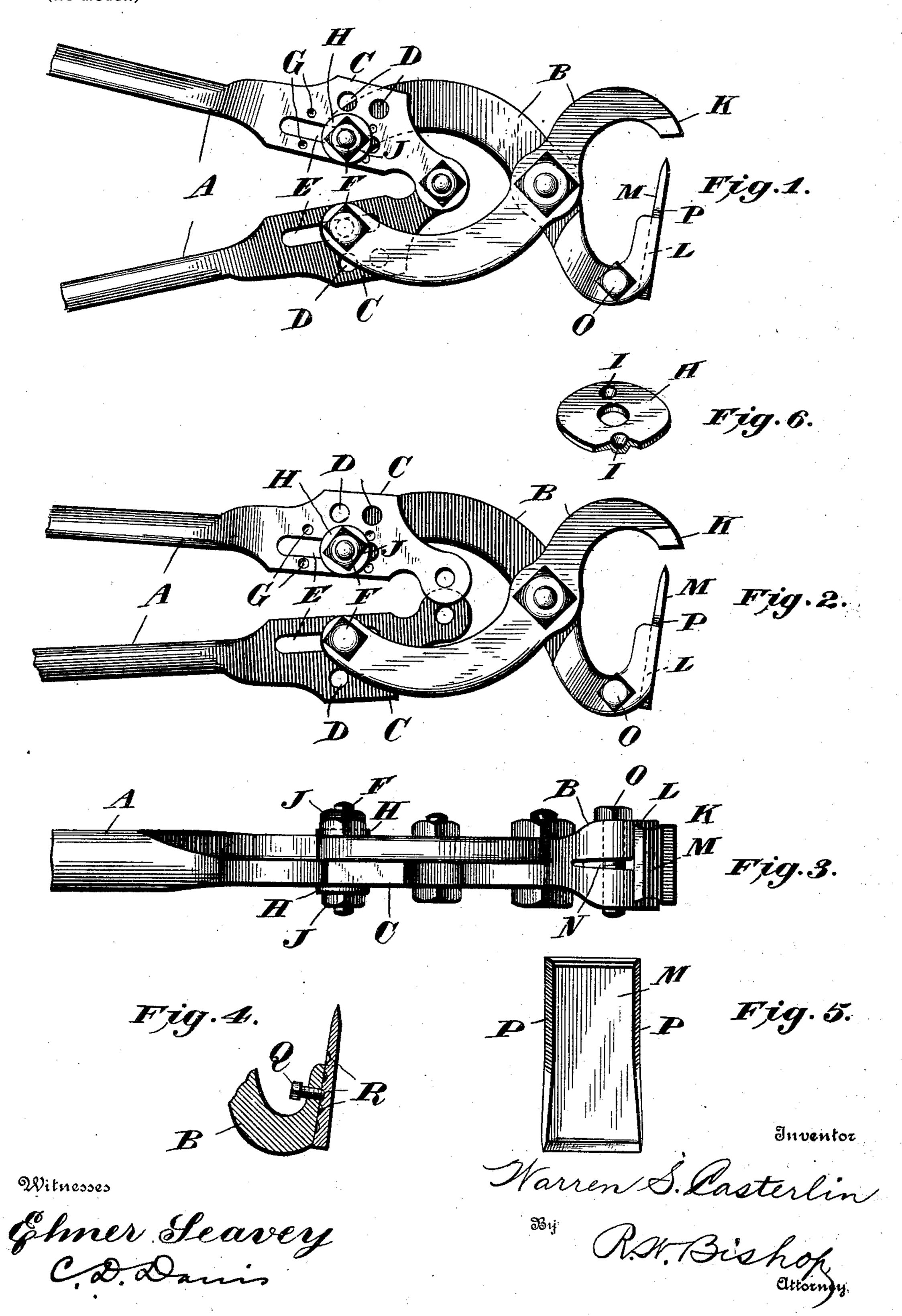
## W. S. CASTERLIN. HOOF TRIMMER.

(Application filed May 10, 1902.)

(No Model.)



## UNITED STATES PATENT OFFICE.

WARREN S. CASTERLIN, OF PITTSTON, PENNSYLVANIA.

## HOOF-TRIMMER.

SPECIFICATION forming part of Letters Patent No. 707,822, dated August 26, 1902. Application filed May 10, 1902. Serial No. 106,807. (No model.)

To all whom it may concern:

Be it known that I, WARREN S. CASTERLIN, a citizen of the United States of America, residing at Pittston, in the county of Luzerne 5 and State of Pennsylvania, have invented certain new and useful Improvements in Hoof-Trimmers, of which the following is such a full, clear, and exact description as will enable others skilled in the art to which it ap-10 pertains to make and use the same, reference being had to the accompanying drawings, forming a part hereof.

My present invention relates to improvements in hoof-trimmers, and has special ref-15 erence to means for securing the knife and also to the means for moving the knife toward and from the anvil.

A hoof-trimmer embodying my improvements is shown in the accompanying draw-20 ings; and the invention consists in certain novel features of the same, as will be hereinafter first fully described and then particularly pointed out in the claims.

In the drawings just mentioned, Figure 1 25 is a plan view of the device, the knife being slightly retracted from the anvil. Fig. 2 is a similar view showing the device adapted to be operated as a straight-arm or simple levertool. Fig. 3 is an edge view of the device. 30 Fig. 4 is a detail view showing a modification. Fig. 5 is a detail perspective view of the knife, and Fig. 6 is a detail perspective view of one of the locking-washers.

My improved hoof-trimmer comprises the 35 handle or lever members A, which are preferably pivoted together at their ends, and the working members B, which are pivoted together and also to the lever members. The handle or lever members are provided near 40 their pivot ends with lateral offsets or enlargements C, in which are transverse openings D, and between the said openings and the inner edges of the members I provide longitudinal slots E, as shown. In the preferred 45 arrangement pivot-bolts F are inserted through the ends of the working members and working and handle members together. Inasmuch as it is frequently desirable to limit 50 the movement of the bolts along the slots I form small recesses G in the handle members adjacent to the edges of the slots and provide |

washers H, having struck-up portions or lugs I, which are adapted to engage said recesses when the washers are slipped over the ends 55 of the bolts. Then if the retaining-nuts J be turned up tightly against the washers the engagement of the lugs and the recesses will prevent all movement along the slot by the washers and the bolts on which they are 60 mounted. The working members cross each other and are pivoted together at their point of intersection. One of the members has its end or jaw formed into an anvil K, while the other member has its end turned inward 65 toward the anvil and laterally expanded. This jaw has a dovetailed groove L in its outer end face to receive the knife M, and it is centrally slotted or divided, as shown at N. A clamping-bolt O is inserted transversely 70 through the jaw to clamp the sections thereof securely against the knife. As an additional guard against slipping of the knife during the operation of the tool I provide upwardly or outwardly projecting teeth P on the edges of 75 the knife which will bite into the walls of the groove under the pressure applied to the knife in the operation of trimming a hoof.

In the modification shown in Fig. 4 the knife is secured in the grooved face of the 80 jaw by a set-screw Q, mounted in the jaw and engaging one of a series of notches R in the back of the knife. In this arrangement the jaw is not centrally divided, as will of course be readily understood.

In using the tool the handle members are swung apart, thereby moving the knife away from the anvil. The anvil is then placed against the outer side of the hoof and the handle members swung together, causing the 90 knife to cut through the hoof to the anvil. It will be readily seen that as the handle or lever members are pivoted together independently of their pivotal connections with the working members a compound leverage 95 is exerted on the knife and anvil, so that the operator is enabled to accomplish the desired results very easily and quickly. Should the through these slots E to pivotally connect the | hoof be rather soft and easily cut, the pivotbolt at the ends of the handle members may 100 be removed and the tool operated as a straight-arm or single-lever device. In this instance, however, both the pivot-bolts F must be tightened against movement along

the slots E, so that the handles will form practically continuations of the working members. By shifting the pivot-bolts F along the slots E or inserting them in one of 5 the openings D the leverage may be varied according to the preferences of the workman or the requirements of any particular case. If the bolt in one slot be tightened and the bolt in the other slot be permitted to slide, a

variable leverage will be automatically exerted on the knife, so that the power applied thereto will increase as the knife passes through the hoof from the softer to the harder portion of the same. The knife is securely

15 held, but may be easily removed to be sharpened or adjusted to compensate for the wear. Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is-

20 1. In a hoof-trimmer, the combination of the working members pivoted together, the lever members pivoted together and provided with longitudinal slots, and pivot-bolts inserted through the ends of the working mem-25 bers and the said slots of the lever members.

2. In a hoof-trimmer, the combination of the working members pivoted together, the lever members pivoted together and having lateral offsets provided with a series of trans-

verse openings and also having longitudinal slots between said transverse openings and their inner edges, and pivot-bolts adapted to be inserted through the ends of the working members and the said slots or the said transverse openings.

3. In a hoof-trimmer, the combination of the working members pivoted together, the lever members pivoted together and having longitudinal slots and notches or recesses adjacent to the edges of the said slots, pivot- 40 bolts inserted through the ends of the working members and through the said slots, washers fitted on the said bolts and provided with lugs adapted to engage the said notches or recesses, and retaining-nuts on the bolts 45 adapted to be turned against the said washers whereby the pivot-bolts may be permitted to move along said slots or held against such movement at will.

4. In a hoof-trimmer, the combination of 50 the lever members, the working members pivoted to the lever members and to each other, one of the working members having its end centrally divided and provided with a dovetailed groove in its outer face, a knife fitted 55 in said groove and having teeth on its edges adapted to take into the walls of the same, and a clamping-bolt inserted transversely through the member to secure the knife.

In testimony whereof I have signed this 60 specification in the presence of two subscrib-

ing witnesses.

WARREN S. CASTERLIN.

Witnesses:

W. M. KELLER, Louis Jacob.