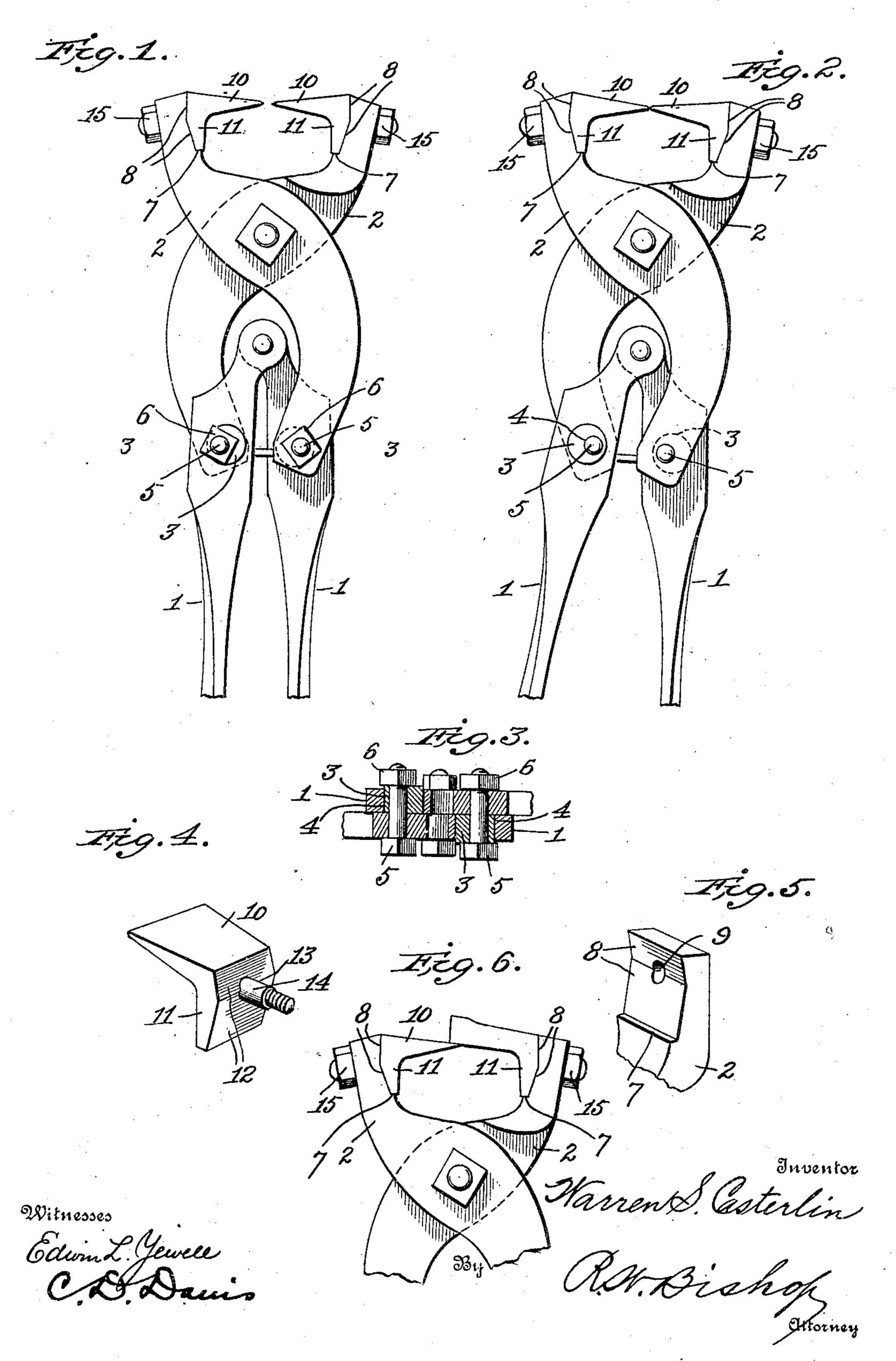
W. S. CASTERLIN., HOOF TRIMMER. APPLICATION FILED AUG. 22, 1906.



UNITED STATES PATENT OFFICE.

WARREN S. CASTERLIN, OF OWEGO, NEW YORK.

HOOF-TRIMMER.

No. 835,900.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed August 22, 1906. Serial No. 331,643.

To all whom it may concern:

Be it known that I, WARREN S. CASTER-LIN, a citizen of the United States of America, residing at Owego, in the county of Tioga and 5 State of New York, 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 apperto tains to make and use the same.

This invention relates to improvements in the construction of hoof-trimmers whereby the strength, durability, and efficiency of the

tool are increased.

The invention consists in certain novel features illustrated in the accompanying drawings and hereinafter fully described and then particularly pointed out in the claims.

In the drawings, Figure 1 is a side eleva-20 tion of a hoof-trimmer embodying the invention. Fig. 2 is a similar view with one of the retaining-nuts removed and showing the adjustable bearing in a different position. Fig. 3 is a sectional view on the line 3 3 of Fig. 1. 25 Fig. 4 is a detail view of one of the bits. Fig.

5 is a detail view of one of the jaws, and Fig. 6 is a side elevation of a portion of the tool,

showing a different form of jaws.

The lever-handles 1 are pivoted together 30 at their upper ends in the usual manner, and the crossed cutter-carrying jaws 2 are pivoted together at their point of intersection beyond the pivoted ends of the lever-handles and have their lower ends pivoted to the 35 lever-handles. The lever-handles are provided with transverse openings in which are placed short sleeves or bearings 3, which have smooth cylindrical edges and are of greater thickness than the handles. These 40 cylindrical sleeves or bearings are formed with eccentrically-disposed openings 4, through which and transverse openings in | viding a large number of angular engaging the ends of the jaws are inserted bolts 5, the | faces between the bit and the jaw. The bits usual retaining-nuts 6 being fitted on the 45 ends of the said bolts. When the nuts are turned home, the cylindrical bearings will be clamped against the side of the jaws, so that the said bearings will turn with the jaws in the operation of the tool and the bolt will be 50 relieved from all pivotal wear. Inasmuch as the wear will be applied to a large surface of the cylindrical bearing, the durability of the tool will be very pronounced. As the bolt passes through an eccentrically-disposed 55 opening in the sleeve or bearing, the jaws can

be easily and quickly adjusted to compensate for the wear on the cutting edges of the bits. When the bearings are so placed as to bring the openings nearest the outer edges of the lever-handles, the ends of the jaws will be 60 spread apart, so that new bits of the extreme length may be accommodated. As the bits are worn through use and the consequent grinding and sharpening, the bearings may be turned so as to bring the bolt-openings 65 nearer the inner edges of the levers, and thus bring the ends of the jaws nearer together to compensate for the shortening of the bits and preserve the proper cutting relation of the same.

On the inner faces of the jaws at their outer ends I form seats for the bits, which have square transverse shoulders 7 at their lower portions or bases and above said shoulders have straight smooth converging faces 8, 75 forming a shallow V-shaped cavity. Extending outward through the jaw from the said cavity is an opening 9. The bits are constructed with a blade or knife portion 10 and a back or securing portion 11, depending 80 from the end thereof, the said back having its outer side formed with two outwardlyconverging faces 12, which meet in a ridge 13 and are adapted to fit snugly in the shallow V-shaped cavity in the jaw, the lower edge 85 of the said back portion of the bit being square to rest firmly against the shoulder 7 on the jaw. From the center of the back portion of the bit an integral stud 14 projects through the opening 9 of the jaw, and 90 the outer end of this stud is threaded to receive a nut 15, which secures the bit in place by being turned home against the outer side of the jaw. This construction not only clamps the jaw to the bit, but absolutely pre- 95 vents turning or twisting of the bit by promay be readily removed when dull in order to be sharpened or, if desired, to substitute 100 other bits of different shape. In Fig. 6 I have shown a square-faced anvil which may be used instead of one of the bits. In this arrangement the opposite bit will cut under the anvil and make a shear cut against the 105 same, the cut being always from the inside and the anvil resting against the outer side of the hoof. This form of cut is preferred by many farriers, and my tool may be used according to the fancy of the operator.

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 levers pivoted together at one end and provided near that end with transverse openings, the bit-carrying jaws pivoted together beyond the ends of the levers and having their free ends in registry with the transverse openings in the levers, cylindrical bearing-sleeves placed in said transverse openings and provided with eccentrically-disposed openings, and retaining-pivots inserted through said eccentrically-disposed openings and the ends of the jaws.

2. In a hoof-trimmer, the combination of the jaws, provided with shallow V-shaped seats in their inner faces at their outer ends, transverse shoulders at the lower ends of said

seats, and openings leading outward from 20 said seats, and the bits having knife portions and back portions depending from the ends of the same, said back portions having square lower ends to rest against the transverse shoulders on the jaws and converging outer 25 faces engaging the V-shaped seats in the jaws, integral studs projecting from the converging faces through the openings in the jaws, and retaining-nuts on the outer ends of the said studs.

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

WARREN S. CASTERLIN.

Witnesses:

FRED C. HILL, G. C. CASTERLIN.