

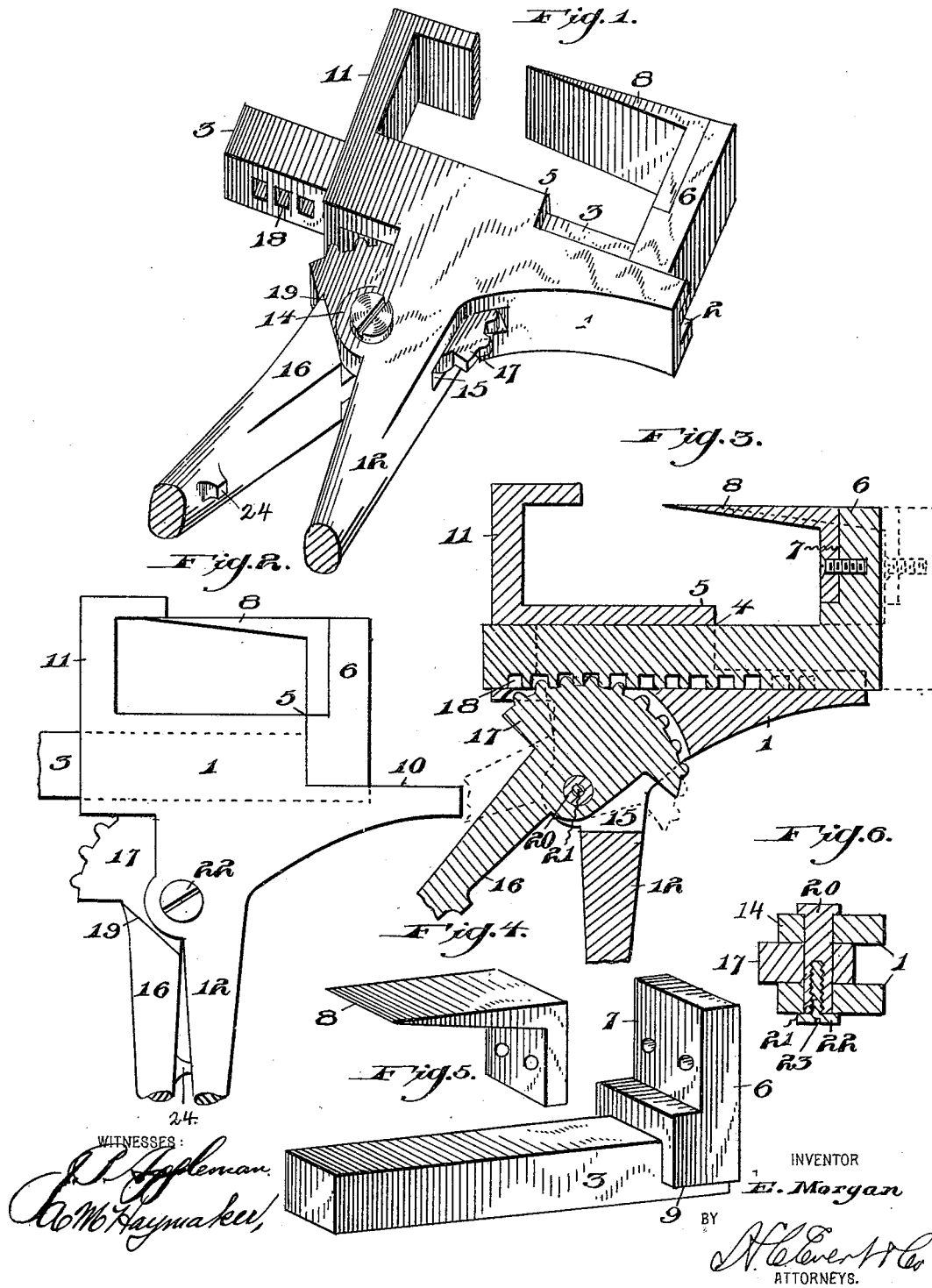
No. 646,058.

Patented Mar. 27, 1900.

E. MORGAN.
HOOF TRIMMER.

(Application filed Sept. 15, 1899.)

(No Model.)



UNITED STATES PATENT OFFICE.

EDWARD MORGAN, OF WILKINSBURG, PENNSYLVANIA.

HOOF-TRIMMER.

SPECIFICATION forming part of Letters Patent No. 646,058, dated March 27, 1900.

Application filed September 15, 1899. Serial No. 730,579. (No model.)

To all whom it may concern:

Be it known that I, EDWARD MORGAN, a citizen of the United States of America, residing at Wilksburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Hoof-Trimmers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in hoof cutters or trimmers, and has for its object to construct a device of this character in which the opening between the cutting edge of the knife and the shoulder against which it operates may be obtained with a less sweep or degree of angle of the pivoted portion of the handles than has heretofore been used in various devices of this class to allow of engaging the 15 hoof for cutting or trimming the same in the manner desired. With my improved hoof-cutter, however, I am enabled to accomplish this result with the pivoted portion of the handle moved to an angle of not exceeding, 20 substantially, forty-five degrees to the rigid or stationary portion of the handles, and thus considerably decrease the sweep required of the pivoted part of the handles to open the cutting-knife.

30 A further object of my invention is to provide a cutting-knife that may be readily removed for the purpose of sharpening or renewing.

Briefly described, my invention consists of 35 a head which has a handle formed integral therewith or rigidly secured thereto, the head being provided with a longitudinally-extending passage-way to receive a sliding bar adapted to operate therein. This sliding bar has a jaw formed integral therewith or rigidly secured thereto, and upon this jaw is removably mounted the cutting-knife. A separate jaw is formed integral with or secured to the head at the opposite end thereof, against which the 40 cutting-knife operates, to allow of the same performing its operation. The operating portion of the handle is pivotally secured to the stationary or rigid portion near the intersection of the latter with the head and is provided 45 with a toothed segment which operates in an opening provided therefor in the rigid portion

of the handle and in an opening in the head, with the teeth thereof engaging in openings provided therefor in the adjacent face of the sliding bar, so that as the pivoted part of the 55 handle is moved outwardly away from the rigid portion or inwardly toward the same the sliding bar is correspondingly moved to open or close the knife.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like numerals of reference indicate similar parts throughout the several views, in which—

Figure 1 is a perspective view of my improved hoof-cutting tool with the handles thereof partly broken away. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical sectional view of the same, showing in full lines the partially-opened position and in dotted lines the position when entirely opened. 65 Fig. 4 is a perspective view of the removable knife. Fig. 5 is a like view of the sliding bar and jaw to which the cutting-knife is secured. Fig. 6 is a sectional view taken through the 70 pivotal line of the handles, showing the form of pivot employed.

Referring to the drawings by reference-numerals, 1 indicates the head, which is provided with a longitudinally-extending pas- 80 sage-way 2, in which is arranged the sliding bar 3, which is adapted to be actuated by the pivotal portion of the handle. For the purpose of securing a greater longitudinal movement of this bar, and thus permitting a greater 85 opening to be obtained between the cutting edge of the knife and the jaw against which it operates, I cut away a part of the inner face of the head, as shown at 4, forming a shoulder 5, against which the jaw 6, that is formed 90 on the end of the sliding bar 3, engages and arrests the inward or closing movement of the knife. This jaw 6 may be formed integral with the bar 3, or it may be secured thereto in any desirable manner, and is should- 95 dered on its inner face, as at 7, to form a seat in which the cutting-knife 8 is secured by means of screws, rivets, or other suitable or desirable means. This cutting-knife is substantially angular in form, the one portion of 100 the same resting within the shouldered portion of the jaw and being secured to said jaw,

as described, with the other portion of greater length and extending in alinement with the sliding bar and being sharpened to a knife edge. The jaw 6 may be further provided
 5 with shoulders 9, the under faces of which engage and ride upon the faces 10, formed by cutting away the head 1, and guide the sliding bar during its movement in the longitudinal passage through the head. The head
 10 1 has formed integral with its other end or suitably secured thereto an outwardly-extending jaw 11, having its end turned in an angular direction toward the cutting-knife. This jaw 11 is of slightly-greater length than
 15 the jaw 6 on the sliding bar, being so constructed that the outer face of the cutting-knife will engage the inner face of the jaw, as is clearly illustrated in Fig. 2 of the drawings.

20 The head 1 has formed integral therewith or rigidly secured thereto a handle 12, which may be of any desirable length and which I have shown partially broken away in the accompanying drawings. It is preferably provided with ears 14, near the intersection with
 25 the head, to receive the pivot-pin, the particular construction of which will be hereinafter specifically described.

The head 1 is provided in its side adjacent
 30 to the handles with an opening 15, which extends into and through opposite sides of the handle 12. A movable handle 16 is pivotally secured to the rigid handle 12 by a pivot-pin passing through the ears 14 and is provided
 35 on its pivoted end with a toothed segment 17, which operates in the opening 15, with its teeth engaging in openings 18, provided therefor in the adjacent face of the sliding bar 3. This handle 16 is shouldered, as at
 40 19, at the point where the toothed segment is connected thereto, the face of the shoulders being so inclined as to allow the swinging movement of the handle without engagement with the ears 14.

45 A neat and convenient form of pivot-pin is shown in which the pin proper (designated by reference-numeral 20) is provided on its one end with a head with the shank of the pin of a length equal to the combined thickness of
 50 the handles when the pivoted handle is in its position, as shown. The other end of this pivot-pin is provided with a screw-threaded opening, which is adapted to receive a screw 21, having a flat head 22, provided with a
 55 transverse slot 23. The pivot-pin is easily removed by removing the screw 21, which may be readily done with the aid of a screw-driver or like implement, and then withdrawing the pin 20.

60 To prevent the pinching of the fingers between the two handles when the knife is closed, I provide a stud 24 upon one of the handles,

shown herein as on the inner face of the pivoted handle.

With the construction of a hoof-cutter as
 65 herein shown and described it will be observed that I am enabled to obtain an exceedingly wide opening between the rigid jaw and the knife when the pivoted handle has been
 70 moved but to an angle of substantially forty-five degrees to the rigid handle, as shown in dotted lines in Fig. 3 of the drawings, and permitting the use of the knife under conditions and in positions which would not be
 75 possible were it necessary to extend this pivoted handle even at right angles to the rigid handle.

No especial form of knife is required further than one to fit in the jaw 6 and be secured thereto, and in case of the knife being
 80 broken a new one may be quickly made by the farrier by bending a piece of steel to the shape shown and sharpening the one edge of the same.

While the construction as herein shown and
 85 described appears to embody the preferable form of my invention, yet it will be observed that various changes may be made in the details of construction without departing from the general spirit of the invention.
 90

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

In a cutting-tool of the class described, the combination of a head provided with a longitudinal passage-way through the same, an
 95 opening registering with the said passage and cut away upon one face forming thereby a shoulder 5 nearly centrally thereof, a rigid jaw formed integral with one end of said head
 100 opposite the cut-away portion, a sliding bar arranged within said passage-way and provided upon one face with a series of teeth, a jaw formed integral with one end of the said bar and provided with a shoulder upon its
 105 inner face, a cutting-knife secured to said jaw and mounted upon the said shoulder, a handle formed integral with the jaw-head and provided with an opening extending transversely therethrough, a pair of ears formed
 110 integral with said handle, a cog-segment pivotally secured to the said ears and operating within the opening in the head, longitudinal passage-way and opening in the said handle and adapted to have its teeth engaging and
 115 operating the sliding bar, and a handle suitably connected to the said segment for operating the same, substantially as described.

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

EDWARD MORGAN.

Witnesses:

JOHN NOLAND,
 E. W. ARTHUR.