Crafts & Weeks,

Hoof-Trimmer.

No 6,983. Patented Jan. 1, 1850.

Fig: 1.

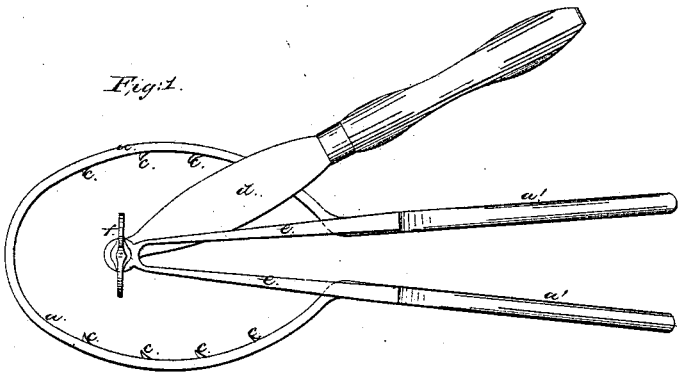


Fig: 2.

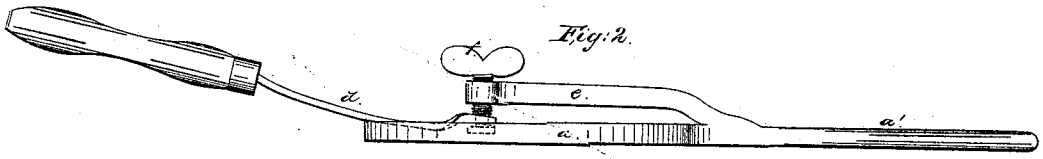


Fig: 3.

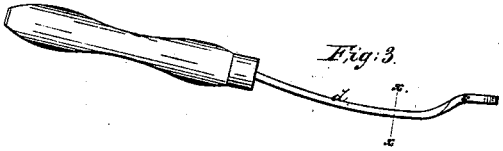


Fig: 4.

Fig: 5.

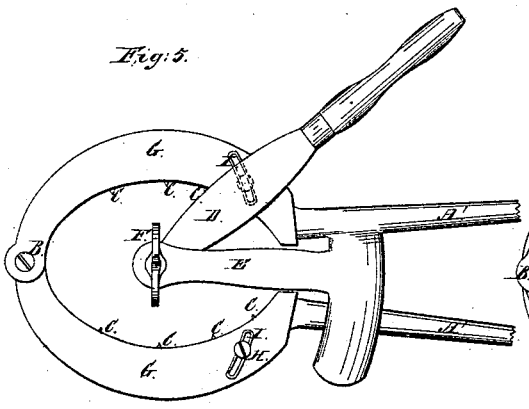
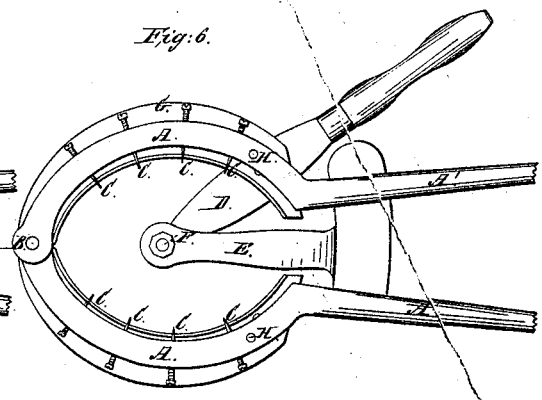


Fig: 6.



UNITED STATES PATENT OFFICE.

ASHLEY CRAFTS AND EBENEZER WEEKS, OF AUBURN, OHIO.

IMPROVEMENT IN INSTRUMENTS FOR PARING HORSES' HOOFS.

Specification forming part of Letters Patent No. **6,983**, dated January 1, 1850.

To all whom it may concern:

Be it known that we, ASHLEY CRAFTS and EBENEZER WEEKS, of Auburn, in the county of Geauga and State of Ohio, have invented a new and useful Combined Grip-Gage and Lever-Knife for Paring the Feet of Horses and other Animals for Shoeing, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a plan of a spring grip-gage and adjustive lever-knife for gripping the foot of the horse, directing the knife and gaging the paring. Fig. 2 is a side elevation of the same. Fig. 3 is a side view of the knife. Fig. 4 is a section of the knife on the dotted line *x x* of Fig. 3. Fig. 5 is a plan or top view of a cast jointed grip-gage, adjustive segment-plates and concave paring-knife. Fig. 6 is a view of the same inverted, showing the pointed screws for securing the grip to the crust of the foot during the operation of paring.

Similar letters in the figures refer to like parts of the apparatus.

Heretofore very little care and attention has been paid to a proper preparation of the foot of the horse for the reception of the shoe, although there is no part of the management of a horse that requires more attention than correct shoeing. No definite rules of shoeing are pursued. The blacksmith generally applies his draw-knife, shoulder-knife, and toe-knife to the delicate parts of the foot of the animal without much care, and frequently not knowing when and how to pare the crust, sole, bars, and frog, having nothing to guide him but his judgment, which is very often not sound on this subject, whereas to be an expert shoer of horses it requires not only a knowledge of the anatomy of the foot, but the use of a convenient and correct adjustive guide and gage to apply to the foot to direct the cutting-instrument, so as to pare the several parts correctly, according to the nature of the foot and the kind of shoe to be used and the various uses to which the horse may be applied. To supply this deficiency of the forge, and to enble the blacksmith to prepare the feet of the horse for shoeing according to a rule, we have invented an implement, to be applied and adjusted and secured to the foot of the horse preparatory to the commencement of the cutting operation, which will enable the blacksmith to pare the crust, soles, and bars of the foot in the most exact manner without injury to the frog by simply moving a lever of the second order, to which a suitable curved knife is affixed, around on a center pin inserted into an arm of a clasp or grip that is made to embrace the foot securely, said center pin being opposite the center of the sole of the foot, and serving as the fulcrum of the knife.

This implement in its general outline resembles a pair of tongs, with the curved portions A A of the legs next the joint B made in the shape of a horseshoe, jointed at the toe, which curved portions are made to clasp the side of the foot, being armed with sharp points C to enter the crust to prevent slipping, the straight portions A′ of the legs serving the purpose of handles, which the smith grasps in his left hand while using the knife D with the right hand, said knife being attached to an arm, E, by a set-screw, F, which serves as a fulcrum or joint pin, on which the knife moves or sweeps around in a circle, and as a set-screw to set the knife (which is made more or less concave) to suit the hollow of the sole of the foot to be pared, so as not to pare too deep, said arm being fixed to one of the aforesaid legs A of the clasp. Two adjustive segmental plates, G, made in the form of a horseshoe, divided and jointed at the toe, are placed upon the above-described jointed clasp A, and attached to it by the joint-pin B, that connects the legs of the clasp, and two set-screws, H, for the purpose of adapting the implement to the paring of feet of various sizes and shapes. The set-screw pass through segmental openings I in said adjustive plates and are screwed into the legs A of the clasp, the segmental openings allowing the plates to move on the center pin, B, at the toe without binding, and the set-screws H confining them to the clasp in any required position. The outer surfaces of these adjustive plates are made flat and smooth, so that the knife (which they are designed to guide) shall sweep round over them without having the cutting-edge injured by cutting into the metal. The heads of the screws H and joint-pin B are countersunk, so that the knife shall pass freely over them without coming in contact with the same.

The arm E must be cast in such a form and position as to cover the frog centrally when the legs of the clasp are closed around the

crust of the foot, so as to arrest the sweep of the knife just before reaching the frog on either side of the said arm E.

The aforesaid jointed grip and adjustive gage-plates may be made of any suitable material and size. Cast-iron, however, will generally be preferred on account of being the cheapest.

In using this implement the smith first determines how much of the crust of the foot he will pare off and what hollow he will give the sole and the shape he intends the bars to have. He then adjusts the plates G and knife D accordingly, and secures the implement to the foot, in the manner already described, and sweeps the knife around in a circular direction, its shank or handle, being arrested against the arm E, covering the frog, and which protects it from injury. Should he find that the sole requires to be pared deeper, he turns the set-screw F, which will depress the knife the required distance. The knife, having two cutting-edges, will pare when moved either to the right or to the left. Figs. 1 and 2 represent a modified form of implement, in which the joint at the toe is omitted, the legs of the grip being made of a single piece of spring-steel and without adjustive plates and screw-points, the arm to which the knife is attached being made of steel in the form of spring-dividers, and forming a part of the legs of the spring-grip. The knife represented in Figs. 1, 3, and 4 is made of the same form as the one represented in Figs. 5 and 6, and is used in the same manner. The holding-points C, to prevent the grip from slipping, are formed on the inside of the grip instead of on the ends of the screws passing through the grip.

The shoe is to be made and secured to the foot in the usual manner.

Having thus described the manner of constructing and using our combined grip and lever-knife for paring the feet of horses for shoeing, what we claim as our invention, and desire to secure by Letters Patent, is—

The combination of the grip A, arm E, and knife D, whether made with or without the adjustive plates G and joint-pin B, or in any way substantially the same, and of any suitable size and material.

In testimony whereof we have hereunto signed our names before two subscribing witnesses.

ASHLEY CRAFTS.
EBENEZER WEEKS.

Witnesses:
LUND WASHINGTON,
WM. P. ELLIOT.