(No Model.)

F. K. HESSE.

VETERINARY FILE.

No. 454,436. Patented June 16, 1891.

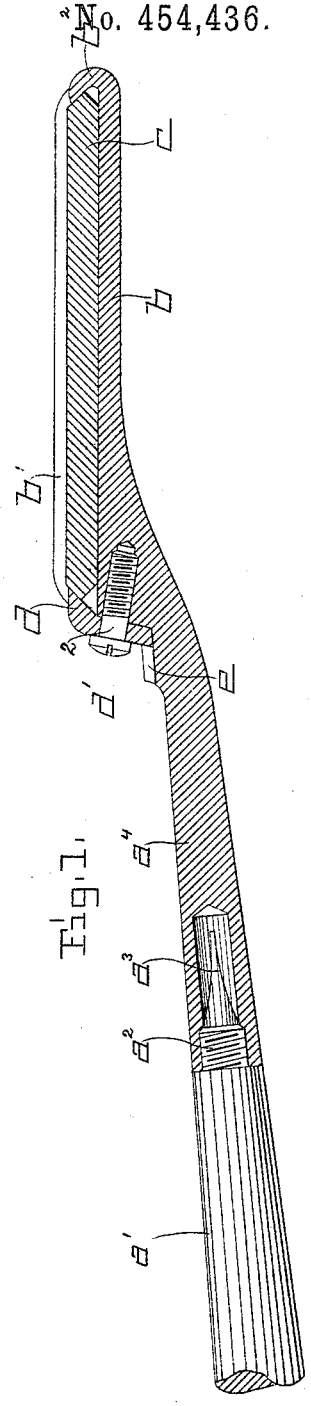

Fig. 1.

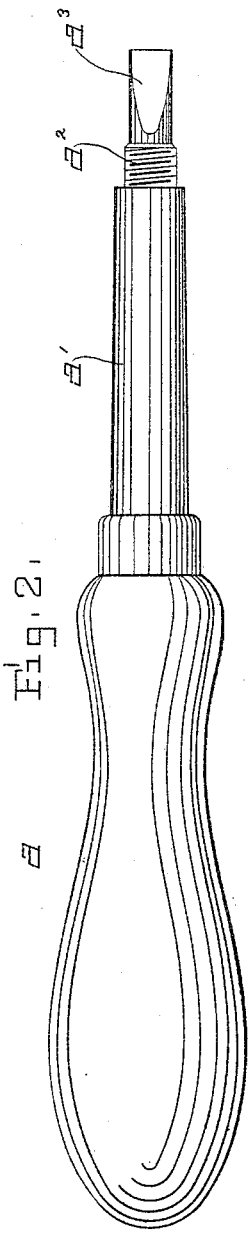

Fig. 2.

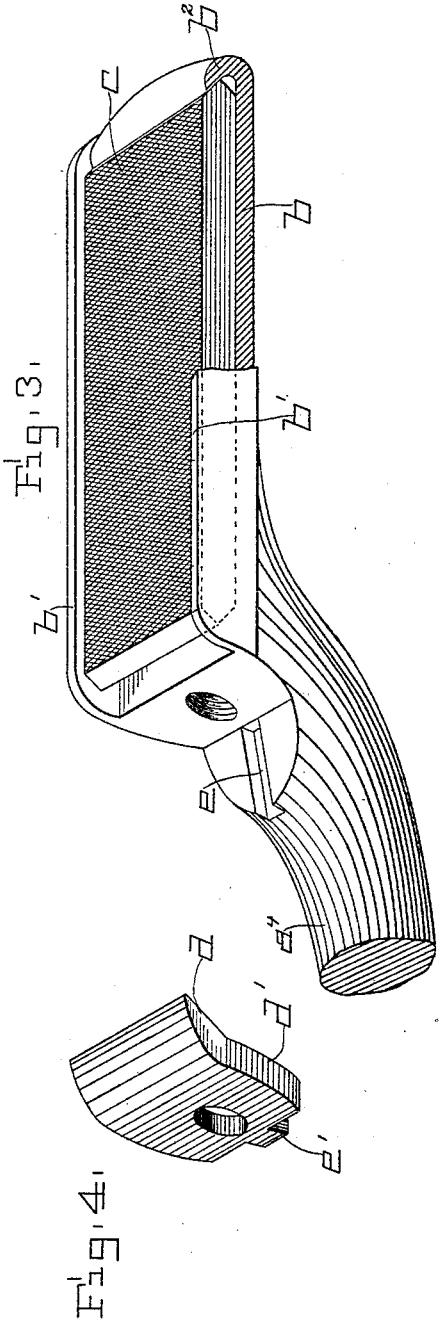

Fig. 3.

Fig. 4.

Witnesses.
Edward F. Allen.
Frederick L. Emery.

Inventor.
Frank K. Hesse,
by Crosby & Gregory Attys.

UNITED STATES PATENT OFFICE.

FRANK K. HESSE, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO CODMAN & SHURTLEFF, OF SAME PLACE.

VETERINARY FILE.

SPECIFICATION forming part of Letters Patent No. 454,436, dated June 16, 1891.

Application filed January 17, 1891. Serial No. 378,064. (No model.)

To all whom it may concern:

Be it known that I, FRANK K. HESSE, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Horse Tooth-Files, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention has for its object to improve the construction of horses' teeth-files or mouth-rasps; and my invention consists in details of construction, to be hereinafter pointed out, and claimed at the end of this specification.

Figure 1 shows a longitudinal section of a horse tooth-file embodying this invention; Fig. 2, a detail of the handle to be referred to; Fig. 3, a perspective view of the file and its holder; Fig. 4, a detail of a locking device to be referred to.

The handle a is attached to a shank portion a', to which is secured a threaded projection a^2, having a screw-driver blade a^3, said screw-threaded projection a^2 entering an internally-screw-threaded socket formed in a shank portion a^4, which latter is formed at its end with a flat broadened base b, substantially rectangular in shape and having at each side a vertical lip b' b', and having at one end an inwardly-turned lip b^2, which is depressed below the surface of the file c. The file c is made wide enough to fit snugly between the vertical lips b' b', and said file is beveled at each end on both faces to present a beveled side or face, irrespective of which face of the file is exposed. One of the beveled ends enters beneath the inwardly-turned lip b^2 and the other end enters beneath an offset or projecting lip d of a locking device or plate d', which is shown in detail, Fig. 4, said locking-plate d' having a hole through it for a screw 2, preferably made of non-rusting material, which passes into an internally-screw-threaded hole formed in the base b, said screw 2 securing the locking device d' in place. The plate d' is made of suitable width to enter between and be guided by the vertical lips b' b'. The shank portion adjacent to the base b has a groove e, which serves as a guideway of the locking device or plate d', a projection e' on said locking device entering the said groove e, such groove and projection, together with the vertical lips b' b', preventing the locking device or plate from turning on the screw or getting out of line. One side of the file may be cut as a rasp or may be made finer than the other, and it may be turned over at will to utilize either side of it. The file may be also readily removed, and as the beveled lips which hold the file in place are depressed below the surface of the file they will not act to injure the animal.

By providing the screw-driver blade a^3 as shown it may be employed to turn the screw 2 as desired, and being formed as an attachment to an indestructible part of the instrument it can never be lost or mislaid, as might be the case with a separate screw-driver.

I do not desire to limit my invention to the lips at the ends of the base being inturned, as by applying considerable pressure to the screw the file may be held in place even if said lips were not inturned. By beveling the ends of the file and also beveling the lips externally all danger of wounding either the soft parts of the mouth or engaging too deeply in the teeth is avoided. The vertical side lips b^2, extending above the surface of the file, act as guides to keep the file in contact with the teeth, and also as shields or guards to protect the inner parts of the cheeks and tongue of the animal when the file or rasp is drawn or pushed in contact with the grinding-surfaces of the teeth.

I do not desire to limit myself to the particular construction herein shown for preventing the locking-plate from turning.

I claim—

1. In a horse tooth-file, the handle and shank or equivalent, the base b, having the lip at its outer end, and vertical lips, as b', at each side to receive and hold the file, combined with a removable locking device at the heel end of the file, consisting of a plate of suitable width to enter between and be guided by said vertical lips b', substantially as described.

2. In a horse tooth-file, the handle and shank or equivalent, and the base b, having the guideway e, combined with the file, the inturned lip b^2 at one end, and the locking de-

vice d' at the other end, having the projection e' following in said guideway, substantially as described.

3. In a horse tooth-file, the handle and shank or equivalent, and the base b, combined with the file beveled at its ends, the inturned lip b^2 at one end, and the removable locking device d' at the other end, substantially as described.

4. In a horse tooth-file, the file and holder for it and the locking device for said file, combined with a two-part shank a' a^4, and a screw-threaded screw-driver socket in the portion a^4, substantially as described.

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

FRANK K. HESSE.

Witnesses:

BERNICE J. NOYES,

EDWARD F. ALLEN.