(No Model.)

F. F. HOFFMANN.

VETERINARY ECRASEUR.

No. 591,403. Patented Oct. 12, 1897.

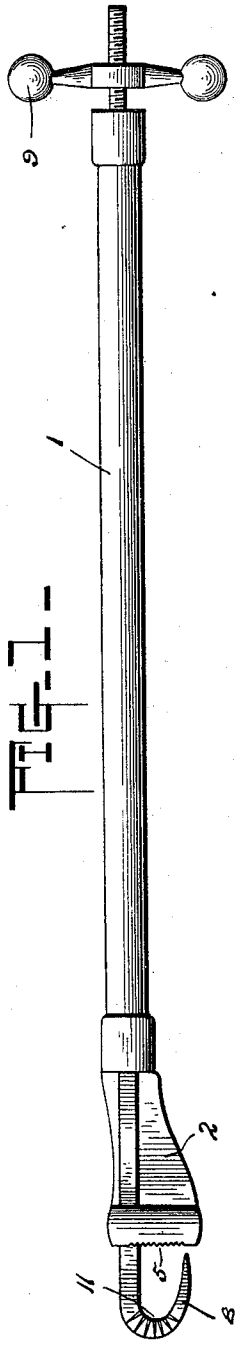


Fig. 1.

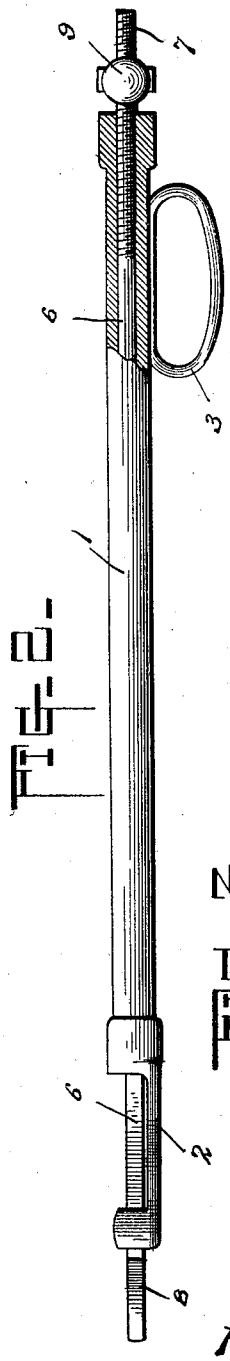


Fig. 2.

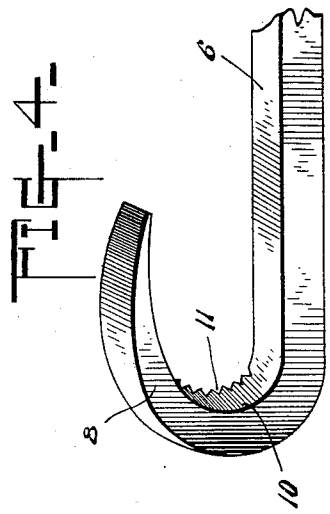


Fig. 4.

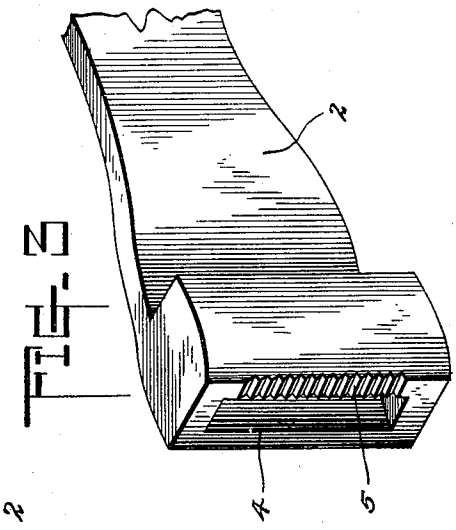


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

FERDINAND F. HOFFMANN, OF BROOKVILLE, PENNSYLVANIA,

VETERINARY ECRASEUR.

SPECIFICATION forming part of Letters Patent No. 591,403, dated October 12, 1897.

Application filed August 28, 1896. Serial No. 604,196. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND F. HOFFMANN, a citizen of the United States, residing at Brookville, in the county of Jefferson and State of Pennsylvania, have invented a new and useful Veterinary Ecraseur, of which the following is a specification.

This invention relates to surgical instruments for veterinary ovariotomical purposes, and aims to provide an ecraseur which will enable the operation to be performed expeditiously and with safety to the patient, since hemorrhage is avoided by crushing the artery simultaneously with the cutting.

The instrument will be described at length hereinafter, and its advantages will appear more fully as the nature of the improvement is disclosed and understood.

In the drawings, Figure 1 is a side elevation of an ecraseur constructed in accordance with this invention. Fig. 2 is a view at right angles to Fig. 1, partly in section. Fig. 3 is a detail perspective view of the active end of the sheath. Fig. 4 is a detail view of the hook.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

A tube 1 forms the body portion of the instrument and terminates at one end in a sheath 2 and is provided at the opposite end with a handle 3. The sheath consists of a guide or keeper having parallel sides 4 and 5, of which the former only is extended to form a flat blade for attachment to the extremity of the tube, the outer side 5 and the end walls of the sheath terminating short of the end of the tube to form an open space, for a purpose hereinafter explained. The walls 4 and 5 are respectively constructed to form a smooth cutting edge and a roughened or serrated cutting edge. A stem 6 is fitted for longitudinal movement in the tube, and the front end is provided with a hook 8, which is adapted to operate in and extend beyond the sheath, the stem being actuated to draw the hook within the sheath by means of a handle 9, fitted upon a threaded portion 7 of the stem and adapted to bear against the contiguous rear extremity of the tube. The hook, which is adapted to engage an artery or cord to be severed, is provided, for coöperation with the smooth and serrated cutting edges of the sheath, with smooth and serrated cutting edges 10 and 11. These cutting edges of the hook are brought into coöperative relation with those of the sheath when the hook is drawn into the latter.

The open space between the inclosed or keeper portion of the sheath and the contiguous end of the tube is of a length greater than the hook, and hence the latter after the severing operation may be drawn wholly into said space to remove any particles of tissue clinging thereto. In other words, after the stem has been operated by the rotation of the handle 9 to complete the severing operation the handle may be grasped and drawn manually backward in order to expose the hook in the space between the keeper portion of the sheath and the contiguous front end of the tube to prevent particles of tissue carried into the sheath by the hook from interfering with the reëxtension thereof for subsequent use. It will be understood that with this, as with other devices of the same class, the object is to sever an artery in such a manner as to prevent subsequent hemorrhage, and hence the contiguous smooth and serrated cutting-faces, of which the former serves to sever the artery, while the latter contuses the same at a point contiguous to the cut.

Having thus described the invention, what is claimed as new is—

1. An ecraseur having an operating-rod terminating at one end in a hook provided with cutting and contusing edges, a guide for said rod terminating at one end in a sheath having cutting and contusing edges to coöperate with those of the hook, said sheath comprising a keeper portion carrying said cutting edges and adapted to receive the hook, and an open-sided portion arranged in rear of the keeper portion and adapted to expose the hook when drawn rearwardly through and beyond the keeper portion, and means for operating the rod, substantially as specified.

2. An ecraseur having a tubular body portion in which is fitted a longitudinally-movable operating-rod provided with means whereby it may be actuated, said operating-rod terminating at its front end in a hook having opposite smooth and serrated cutting

edges, and a sheath carried by the tube forming the body portion, having an inclosed or keeper portion adapted to receive the hook and provided with smooth and serrated edges for coöperation therewith, and having one side wall of said keeper portion extended and attached to the tube, the opposite side of the sheath being open to form a space exceeding the hook in length, whereby the hook may be wholly exposed by drawing the same rearwardly beyond the keeper portion, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of witnesses.

FERDINAND F. HOFFMANN.

Witnesses:

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