

(No Model.)

S. B. DUNN.
VETERINARY SURGICAL INSTRUMENT.

No. 471,107.

Patented Mar. 22, 1892.

Fig. 1.

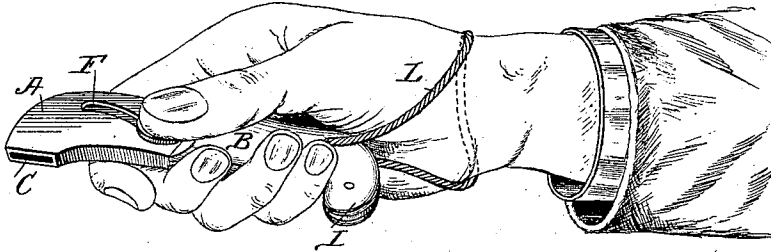


Fig. 2.

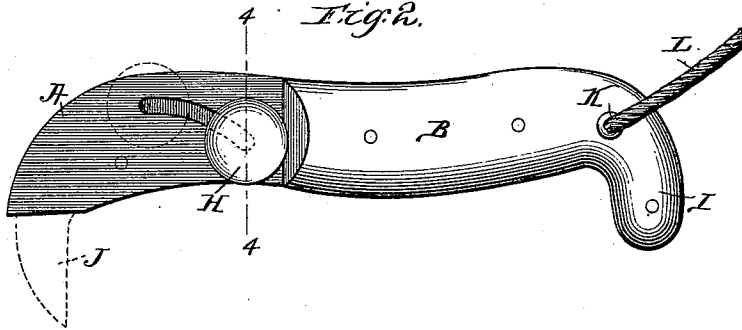


Fig. 3.

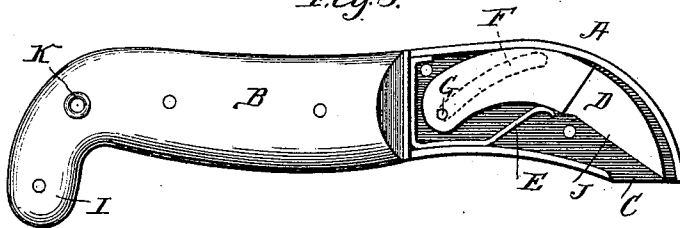
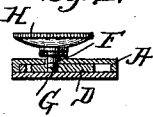


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

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VETERINARY SURGICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 471,107, dated March 22, 1892.

Application filed July 28, 1891. Serial No. 400,978. (No model.)

To all whom it may concern:

Be it known that I, SOLA B. DUNN, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Veterinary Surgical Instruments, of which the following is a specification.

This invention relates to improvements in veterinary surgical instruments especially designed for use in performing embryotomic operations, in which it becomes necessary to remove the dead fetus from the womb of the animal, in which operation it is now the almost universal custom to dismember or dissect the fetus while in the womb, so that it may be removed in pieces.

The object of this invention is to produce as a new article of manufacture a surgical instrument especially designed for the performance of such operations, in which the knife is sheathed when inserted into the womb, but may be unsheathed while in the womb, and which instrument is of such character that it may be secured to the hand independent of the grip of the hand, so that the accidental loss or failure of withdrawal of the instrument due to the partial paralysis of the hand produced by the contraction of the womb is avoided. This object is attained by the devices illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of an instrument embodying my invention, illustrating the position in which the knife is held in the hand while being inserted into the womb; Fig. 2, an enlarged side elevation of the instrument, showing in dotted lines the movements of the parts in the unsheathing of the knife; Fig. 3, a similar view taken from the opposite side of the instrument, with the side of the casing removed, so as to show the construction and operation of the knife and its position when sheathed; and Fig. 4, a transverse vertical section on the line 4 4 of Fig. 2.

Similar letters of reference represent the same parts in the several figures of the drawings.

Referring by letter to the accompanying drawings, A indicates a flat curved casing of suitable dimensions, rigidly secured at one

end to a handle B and provided at its opposite end with an oblong slot C, through which projects a longitudinally-adjustable knife D, located within the casing and curved longitudinally, so as to substantially conform to the curvature of the walls of the casing, which serve as a guide for the knife in its movements into and out of the casing, the knife being held in contact with the back wall of the casing by a flat spring E of suitable form. In one side of the casing is formed a curved slot F, through which works a set-screw G, entering the shank of the knife, the head H of which screw is flattened or enlarged and milled upon its edge, so as to form a convenient thumb-piece for operating the knife in projecting it from and withdrawing it into the casing and also for locking the knife in either its adjusted or sheathed position. The rear end of the handle terminates in a hook I, substantially at right angles to the body of the handle and parallel with the cutting-edge J of the knife when the latter is projected from the casing, so that by drawing directly upon the instrument in line with the handle and against the hook the knife will perform its work. The handle is also provided at the point of conjunction with it of the hook with an eyeleted perforation K, through which is passed a cord L, forming a loop, which is intended to encircle the wrist of the operator during the use of the instrument, as illustrated in Fig. 1, so that in the event of paralysis of the muscles of the hand produced by the contraction of the womb during the performance of the operation there is no danger of dropping or losing the instrument or avoiding its withdrawal even though there is not sufficient strength left in the hand to hold onto the instrument while withdrawing the hand, and the cord is materially assisted in this operation by the hook on the end of the handle, which is necessarily engaged by the cramped and bent fingers and would of itself alone almost insure the desired result; but for greater and absolute safety it is preferable to employ the wrist-loop in connection therewith.

Such an instrument as I have shown and described is extremely useful in performing operations in embryotomy, rendering such operations comparatively safe and far less

laborious than with any of the instruments heretofore used for this purpose, besides which the construction and operation of the instrument is such that the operator can handle it with comparative ease in the performance of even such a difficult operation, being especially adapted as to the shape of the cutting-knife for the performance of the work to be done.

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

15 1. As a new article of manufacture, a veterinary embryotomic instrument consisting of a curved casing containing a longitudinally-adjustable knife adapted to be sheathed therein or projected therefrom and said casing being rigidly secured to a handle terminating at its end in a hook, substantially as described.

20 2. As a new article of manufacture, a veterinary embryotomic instrument consisting of a curved casing having an opening, a handle, to one end of which the casing is secured

and the opposite end of which terminates in a hook, a knife arranged in said casing and adapted to be reciprocated to and from said handle through said opening, and a wrist-loop working through a perforation in and secured to the handle, substantially as described.

3. As a new article of manufacture, a veterinary embryotomic instrument consisting of a curved casing secured at one end to a handle terminating in a hook and containing a sliding knife adapted and arranged to be projected from or sheathed within the casing through a slot in the opposite end thereof, and a set-screw working through a curved slot in the casing and engaging the shank of the knife, so as to operate the knife or lock the same in either adjusted position, substantially as described.

SOLA B. DUNN.

Witnesses:

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