

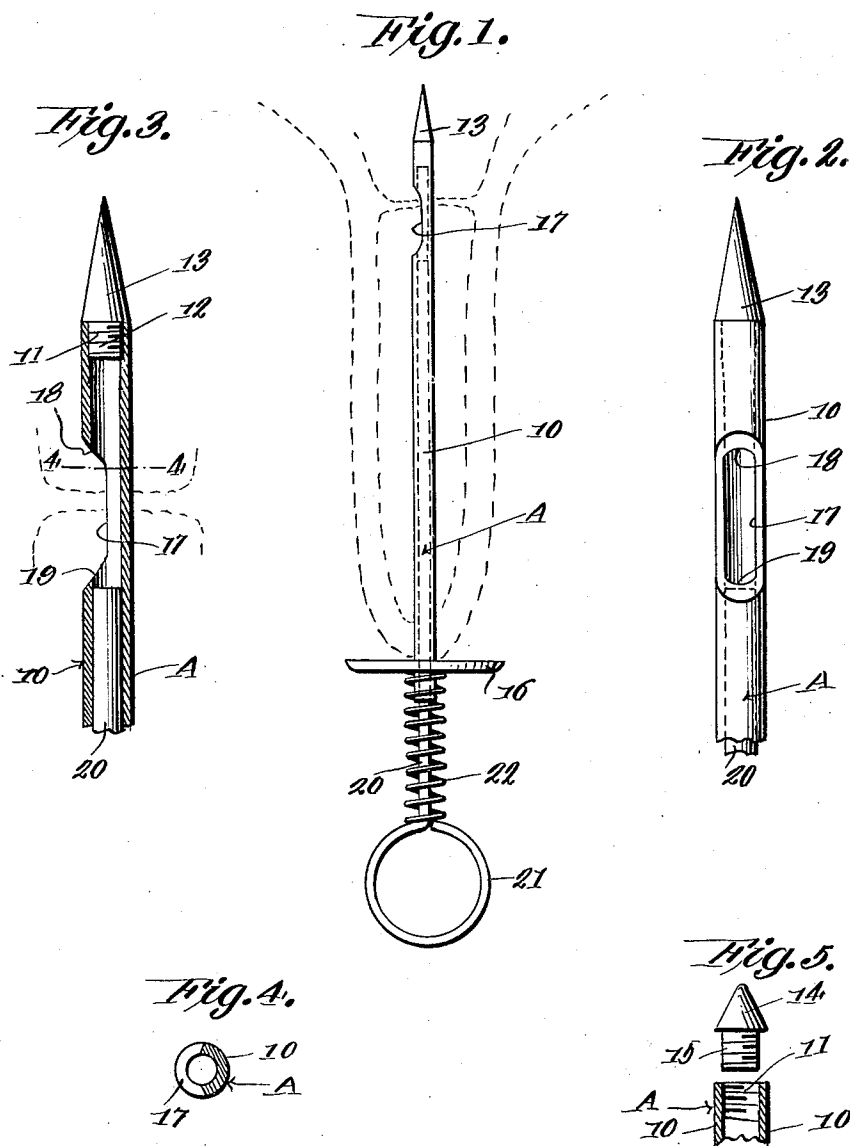
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TEAT MEMBRANE AND TUMOR REMOVER

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TEAT MEMBRANE AND TUMOR REMOVER

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This invention appertains to veterinary surgical instruments and has for one of its primary objects to provide a device for operating on the teats of cows for removing or cutting tumor or membrane formations therein which hinder or stop the flow of milk there-through.

Another important object of my invention is the provision of a veterinary instrument for removing membrane from the teats of cows embodying a hollow sleeve having a penetrating point for insertion in the teat and for puncturing the membrane, the hollow sleeve having adjacent to the penetrating point thereof a cut out slot provided with a cutting edge, with a slide rod mounted in the sleeve for forcing the edge of the punctured membrane against the cutting edge of the slot, thereby permitting the cutting of the membrane as the sleeve is turned within the teat.

A further object of my invention is the provision of novel means for associating the penetrating point with the hollow sleeve whereby different types of points can be used for different purposes and whereby the sleeve and point can be readily cleaned and kept in a sanitary condition after an operation.

A still further object of my invention is to provide an improved veterinary surgical instrument of the above character, which will be durable and efficient in use, one that will be simple and easy to manufacture, and one which can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawings in which drawings:

Figure 1 is a side elevation of my improved surgical instrument showing the same in use, the teat of the cow and the obstructing membrane being shown in dotted lines.

Figure 2 is an enlarged fragmentary side elevation of the instrument illustrating the cut out notch or slot in the side wall of the sleeve for cutting the punctured edge of the membrane.

Figure 3 is a similar view taken at right angles to Figure 2 with the sleeve in sections and showing the punctured membrane in dotted lines.

Figure 4 is a transverse section taken on the line 4—4 of Figure 3, and

Figure 5 is a detail fragmentary sectional view showing a different type of penetrating point.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter A generally indicates my improved veterinary surgical instrument which comprises an elongated hollow tubular sleeve or needle 10 preferably formed of steel suitably treated to prevent the corrosion thereof. The outer or forward end of the sleeve or hollow needle is internally threaded as at 11 for the reception of the threaded shank 12 of a penetrating point 13, see Figure 3 of the drawings. The penetrating point 13 is of an elongated character and is preferably used for initially puncturing the membrane or tumor and after the membrane has been punctured the sleeve can be removed, if so desired, and the relatively blunt penetrating point 14 used in lieu thereof, this point likewise having a threaded shank 15 for engaging in the threaded end of the sleeve or needle.

It is to be noted, however, that the points 13 and 14 extend over the outer end of the needle or sleeve flush with the outer face of said sleeve or needle.

Secured to the rear or outer end of the sleeve or needle 10 is a guard disc 16 which limits the insertion of needle or sleeve within the teat and also functions as a hand grip for turning an operating sleeve as will be later described.

The sleeve or needle 10 adjacent to its outer end is provided with a cut out portion or slot 17 the opposite end walls of which are beveled in opposite directions as at 18 and 19, the beveled wall 19 defining a sharp cutting edge.

For operating with the sleeve or needle 10 and slidable in the same for reciprocatory movement is the cutter plunger rod 20. This rod is of a greater length than the sleeve and

extends outward of the rear end of the sleeve at all times and is provided with a suitable manipulating handle or loop 21. An expansion coil spring 22 can be placed about the

5 rod 20 between the guard disc 16 and the handle 21 for normally holding the cutter rod in its extended position and the inner end of the cutter rod in rear of the slot or cut out portion 17.

10 In use of my improved instrument, the penetrating point 13 is associated with the hollow tubular sleeve or needle 10 and this sleeve is inserted in the teat passage and the thumb of the operator is used so as to feel

15 the membrane or tumor and after the same is located the penetrating point is pushed therethrough. If preferred, and in order to prevent further injury to the cow the sleeve can be removed from the teat and the sharp

20 pointed penetrating point 13 removed and the blunt point 14 substituted therefor. The sleeve is again inserted in the teat and the growth is again located by the thumb and forced or held within the cut out portion or

25 slot 17. The cutter plunger rod 20 is now pressed inward against the tension of its spring and the cutter plunger rod will force the edge of the punctured membrane against the cutting edge 18 of the cut out portion or

30 slot thereby cutting away said edge. The plunger rod can now be released and the sleeve is turned a slight distance after which the membrane is again held in the cut out portion or slot 17 and the plunger rod again

35 actuated. This procedure takes place until the entire edge of the membrane or tumor around the punctured portion is cut away. The sleeve can now be removed from the

40 teat and the cut surface will heal in a very short length of time in view of the clean cut made by the sharp cutting edge and the cutter plunger rod. The trimming and puncturing of the membrane or tumor forms an enlarged opening sufficient to permit the flow of milk

45 therethrough.

Changes in details may be made without departing from the spirit or the scope of this invention:—

What I claim as new is:

50 1. A veterinary surgical instrument for removing membrane and tumorous growths from the teats of cows comprising an elongated tubular sleeve, a removable penetrating point on the forward end of the sleeve, the

55 sleeve adjacent to the penetrating point being provided with a cutaway portion having the forward edge thereof beveled to provide a cutting edge, and a plunger cutting rod reciprocally mounted in said hollow

60 sleeve having a flat free end for forcing the tissues to be cut against the cutting edge.

2. A veterinary surgical instrument for removing membrane or tumorous growths from the teats of cows comprising an elongated tubular sleeve, a penetrating point

carried by the forward end of the sleeve, the sleeve adjacent to said point being provided with a cut out portion having the forward edge thereof beveled to provide a cutting edge, a guard disc carried by the rear edge

70 of the sleeve, and a reciprocatory plunger rod mounted in said sleeve having a flat free end for forcing the tissues to be cut against the cutting edge.

3. A veterinary surgical instrument for removing membrane or tumorous growths from the teats of cows comprising an elongated tubular sleeve, a penetrating point carried by the forward end of the sleeve, the sleeve adjacent to said point being provided with a

80 cut out portion having the forward edge thereof beveled to provide a cutting edge, a guard disc carried by the rear edge of the sleeve, a reciprocatory plunger rod mounted in said sleeve, a contractile coil spring placed

85 about the plunger rod, and an operating handle on said plunger rod, the opposite ends of the expansion spring engaging said handle and said guard disc, said penetrating point and plunger being removable from the sleeve

90 to facilitate the cleaning of the sleeve.

In testimony whereof I affix my signature.

OLE THOSTENSON.

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