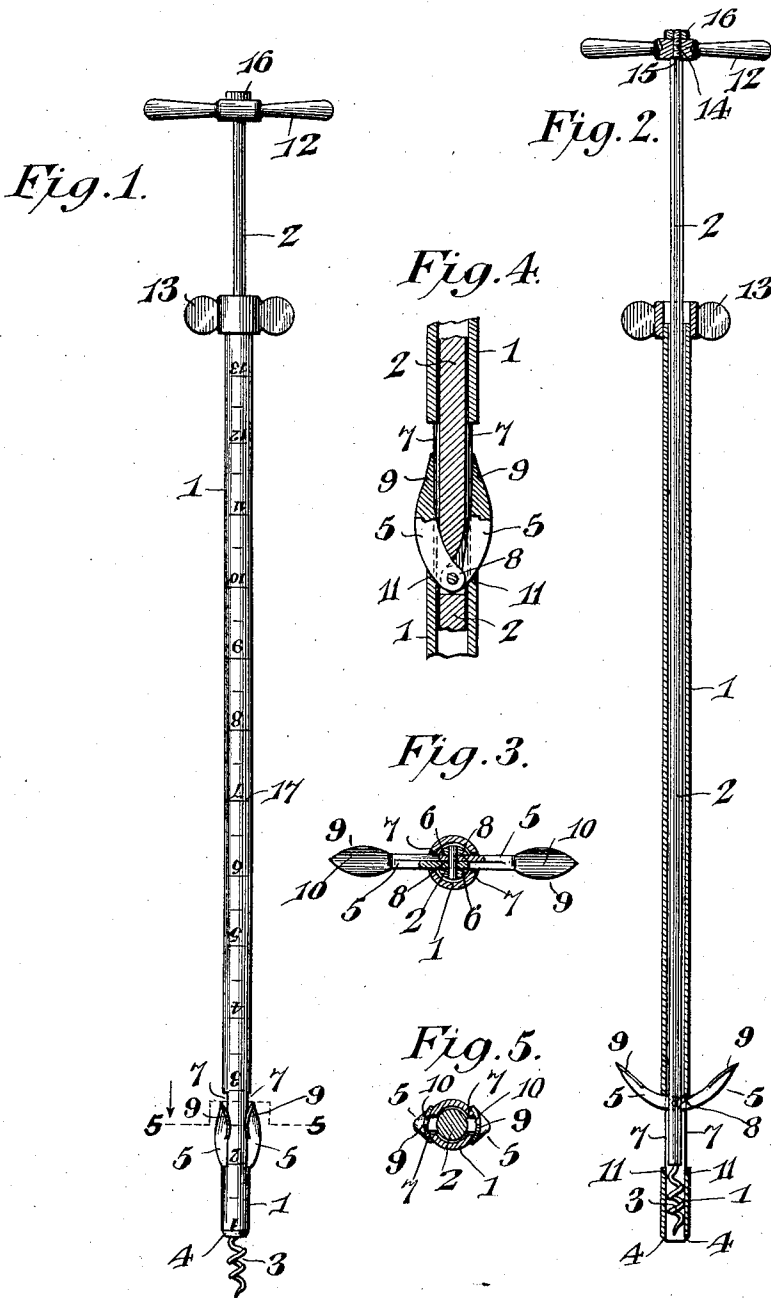


A. L. TOWNSEND.
OBSTETRICAL INSTRUMENT.
APPLICATION FILED APR. 15, 1913.

1,063,750.

Patented June 3, 1913.



WITNESSES

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ABRAHAM LINCOLN TOWNSEND, OF IOLA, KANSAS.

OBSTETRICAL INSTRUMENT.

1,063,750.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed April 15, 1913. Serial No. 761,373.

To all whom it may concern:

Be it known that I, ABRAHAM L. TOWNSEND, a citizen of the United States, residing at Iola, in the county of Allen and State of Kansas, have invented a new and useful Obstetrical Instrument, of which the following is a specification.

The invention relates to improvements in obstetrical instruments.

10 The object of the present invention is to improve the construction of obstetrical instruments, and to provide a simple, inexpensive and efficient instrument designed for extracting a dead fetus from a pig or other
15 animal, and capable of operating on the same in either a head or post presentation and adapted to penetrate the intestines or stomach cavity and let out the gas, thereby greatly facilitating the removal of the fetus.
20 A further object of the invention is to provide an obstetrical instrument adapted to be introduced into an animal in a closed condition, and capable of enabling a dead fetus to be removed with a straight pull without
25 liability of lacerating a sow or other animal.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying
30 drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing
35 any of the advantages of the invention.

In the drawing:—Figure 1 is an elevation of an obstetrical instrument, constructed in accordance with this invention, the hooks or
40 gaffs being folded or closed and the spiral puncturing member or screw being extended. Fig. 2 is a longitudinal sectional view of the same, the puncturing screw or member being withdrawn, and the hooks or gaffs
45 being extended. Fig. 3 is an enlarged transverse sectional view of the instrument, showing the hooks or gaffs open or extended. Fig. 4 is an enlarged detail longitudinal sectional view, showing the hooks or gaffs folded
50 or closed. Fig. 5 is a transverse sectional view on the line 5—5 of Fig. 1.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

55 In the accompanying drawing in which is illustrated the preferred embodiment of

the invention, the obstetrical instrument, which is designed to be constructed of steel or other suitable metal and to be finished in a manner to enable it to be conveniently
60 sterilized, comprises in its construction an outer longitudinal tube 1 constituting a shield and forming a guide and housing for a relatively movable inner longitudinally disposed rod 2, carrying at its outer end a
65 spiral puncturing member or screw 3, which is preferably in the form of an ordinary corkscrew, as illustrated in the accompanying drawing, but any other suitable puncturing tip or member may be employed, and the
70 puncturing tip or screw is suitably secured at its inner end to the outer terminal of the rod 2. The spiral puncturing member or screw is adapted to extend beyond the outer tube 1 and occupies such position when the
75 rod is at the limit of its outward movement, as illustrated in Fig. 1 of the drawing, and it is carried inwardly to a position within the outer end of the tube 1 by the rod when the latter is moved to the limit of its inward
80 movement. The puncturing tip or screw is adapted to pierce the intestines or stomach cavity of a dead fetus, as hereinafter fully explained, and the outer end of the tube 1 is provided with a cutting edge 4, formed by
85 tapering the tube exteriorly or by any other suitable means and adapted to cut the screw or tip loose when the same is drawn into the outer end of the tube 1 in the operation of the instrument. The rod also carries a
90 pair of foldable hooks or gaffs 5 curved longitudinally and pivoted at their inner ends in a slot 6 in the rod 2, and extending outwardly through opposite slots 7 in the sides of the tube 1. The inner ends 8 of the hooks
95 or gaffs 5 are recessed or reduced at opposite sides and are fitted together, the shanks and bills of the hooks being located in the same transverse plane. The shanks of the hooks have flat side faces, and the bills 9
100 are oppositely tapered and approximately spoon-shaped, being provided with outer rounded or convex faces and inner hollowed out or concave faces 10. This construction enables the bills of the hooks to fold compactly against the tube or shield 1 and fit snugly the opposite side thereof, so as to be entirely out of the way when introducing
105 an instrument into an animal. The slot 6 of the rod has inner side extensions, which facilitate the folding of the hooks or gaffs, as clearly illustrated in Figs. 4 and 5 of

the drawing. The slots 7 of the tube 1 are of a length to cause their inner end walls to engage and distend the hooks or gaffs when the spiral puncturing screw or tip is withdrawn into and housed by the outer end of the tube 1. The outward movement of the rod to project the spiral puncturing tip or screw carries the pivoted ends of the hooks or gaffs into engagement with the outer end walls 11, which may be beveled, as shown, to insure a positive closing or folding of the hooks or gaffs against the tube 1.

To facilitate the operation of the instrument, the rod 2 is provided at its inner end with a transversely disposed handle 12, and the tube 1 is provided at its inner end with a winged grip 13. The handle is provided with a central opening to receive the end 14 of the rod, which is reduced to provide a shoulder 15, threaded for the reception of a nut 16, but the handle 12 may be secured to the rod in any other desired manner. The winged grip 13 is suitably secured to the inner end of the tube and is provided at opposite sides with projections or wings, preferably extending in the same direction as the handle 12.

In the operation of the instrument, the screw is inserted into the mouth of the offspring with the aid of the finger, and the operator starts screwing the instrument into the dead fetus. The tube 1 is provided with graduations 17 for indicating the distance the instrument is inserted, which should be sufficient to penetrate the intestines or stomach cavity for letting out the gas. When this is accomplished the tube 1 is held steady and the rod 2 is drawn outwardly a sufficient distance to distend the hooks or gaffs and withdraw the screw into the tube the sharp edges 4 of the end of the tube cutting the screw loose and preventing the screw from lacerating the old animal in extracting the fetus. The gaffs engage the fetus back of the jowls and it may be extracted with a straight pull. In the case of a post presentation, the instrument may be inserted in the rectum.

What is claimed is:—

1. An instrument of the class described including a tube, a rod slidable in the tube and provided with a screw forming a spiral tip and adapted to be projected beyond the tube, and foldable engaging means connected with the rod and foldable against the tube by the outward movement of the rod and adapted to be distended by the inward movement of the rod.

2. An instrument of the class described including a tube provided at its outer end with a cutting edge, and a rod slidable in the tube and provided with a screw arranged to be projected beyond the cutting edge of the tube, whereby the latter will cut the screw loose when the rod is moved inwardly.

3. An instrument of the class described including a tube provided with a slot or opening, a rod slidable in the tube, and a foldable engaging member extending through the slot or opening of the tube and pivotally connected to the rod and actuated by the latter to engage it with the end walls of the slot or opening, whereby the engaging member is positively moved to a folded position at the exterior of the tube and is carried therefrom to an extended engaging position.

4. An instrument of the class described including a tube provided with opposite slots, a rod slidable in the tube and having a slot, and a pair of hooks or gaffs extending through the slots of the tube and pivoted at their inner ends in the slot of the rod and carried into and out of engagement with the walls of the slots of the tube to fold them against the latter and to extend them therefrom.

5. An instrument of the class described including a tube, a rod slidable in the tube, and a hook or gaff actuated by the rod to fold it against the tube and to extend it therefrom, said hook or gaff being provided with an outer approximately spoon-shaped head presenting when folded an inner concave face and an outer convex face.

6. An instrument of the class described including an outer tube provided with graduations and having a handle or grip at its inner end, a rod slidable in the tube and provided at its outer end with a puncturing tip arranged to be extended beyond the tube and to be withdrawn into the same, said rod being also provided at its inner end with a grip or handle, and foldable engaging means operatively connected with the tube and the rod and actuated by the relative movement of the latter to fold it against the tube and extend it therefrom.

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

ABRAHAM LINCOLN TOWNSEND.

Witnesses:

FRANCES WILSON,
C. C. AUSERMAN.