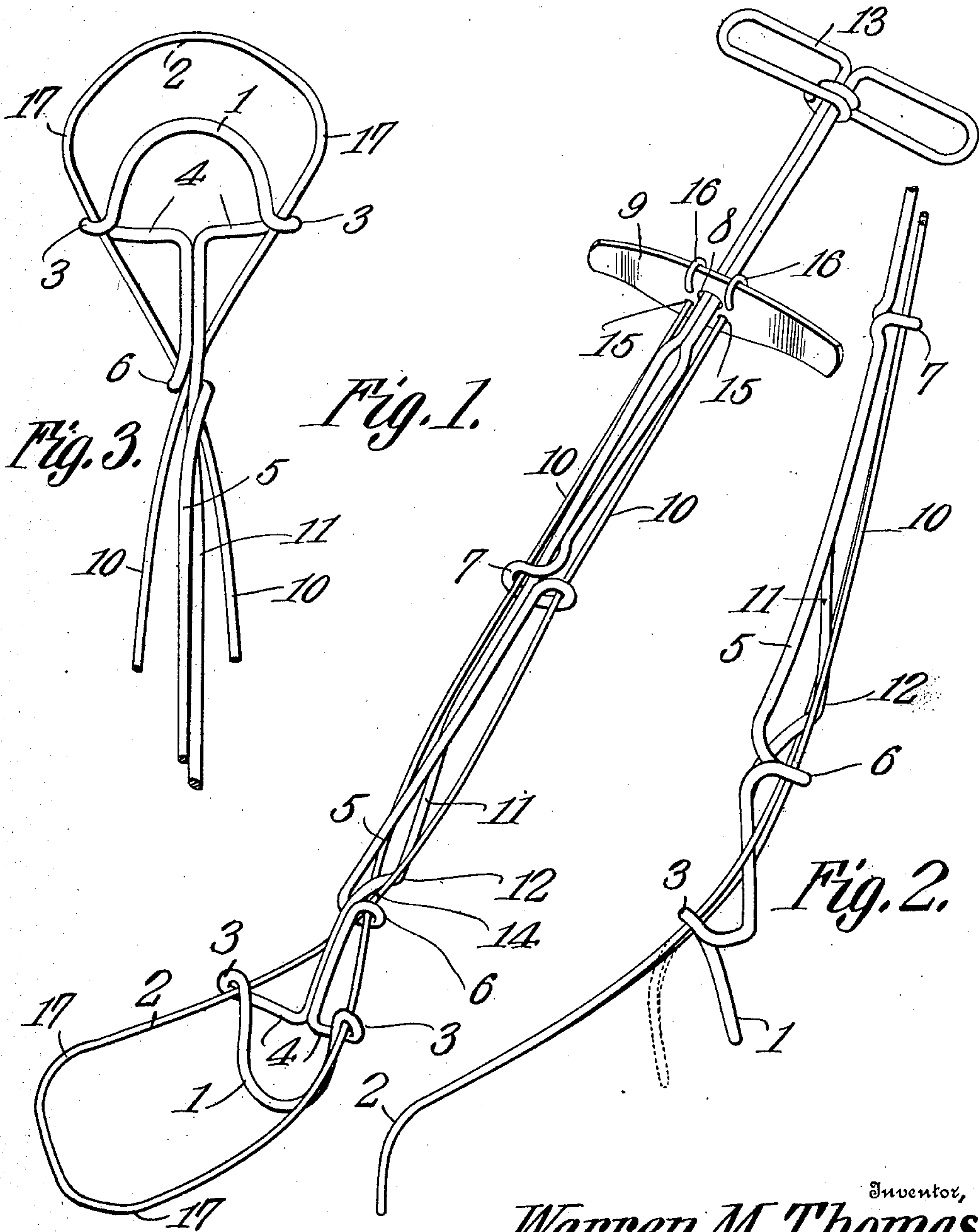


W. M. THOMAS.  
OBSTETRICAL INSTRUMENT.  
APPLICATION FILED MAY 21, 1908.

919,397.

Patented Apr. 27, 1909.



Witnesses:  
*E. J. Harnett*  
*R. M. Elliott*

Inventor,  
*Warren M. Thomas.*  
By *C. Snow & Co.*  
Attorneys.



# UNITED STATES PATENT OFFICE.

WARREN M. THOMAS, OF NORTH ENGLISH, IOWA.

## OBSTETRICAL INSTRUMENT.

No. 919,397.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed May 21, 1908. Serial No. 434,168.

*To all whom it may concern:*

Be it known that I, WARREN M. THOMAS, a citizen of the United States, residing at North English, in the county of Iowa and State of Iowa, have invented a new and useful Obstetrical Instrument, of which the following is a specification.

This invention relates to obstetrical instruments, such as are employed in aiding swine in delivering their young.

The object of the invention is to provide an instrument of this character which shall be simple of construction, certain in operation, and which in use will not inflict injury nor cause unnecessary pain to the animal being delivered.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of an obstetrical instrument, as will be hereinafter fully described and claimed.

In the accompanying drawings forming a part of this specification and in which like characters of reference indicate corresponding parts—Figure 1 is a view in perspective of an obstetrical instrument constructed in accordance with the present invention. Fig. 2 is a view in side elevation of a portion of the instrument, the inoperative position of the jaws being shown in full lines, and their operative position in dotted lines. Fig. 3 is a top plan view of the entering end of the instrument.

The instrument embodies two jaws 1 and 2 which are disposed at an obtuse angle to the length of the instrument and are transversely bowed or curved to the appropriate shape, the former to pass under the jaw and the latter over the crest of the cranium of the fetus. The jaw 1 is relatively rigid and the jaw 2 flexible and expansible in order to permit it readily to pass around and firmly grip the part with which it is brought into engagement. The two jaws are curved toward each other in order to provide a crotch or loop which will operate to compress the part around which the jaws pass, and thus insure a firm hold thereon. The branches of the wire at the two terminals of the jaw 1 are bent to form two eyes 3 that constitute combined distenders and contractors for the jaw 2, inasmuch as on movement of the jaw 2 in one direction it is expanded by the eyes and on movement in the opposite direction it is contracted, and thence bent inward

toward each other to form two substantially aligned members 4, forming the rear wall of the jaw. The branch 5 adjacent to the members 4 is formed into a guide or keeper 6 disposed at right angles to the length of the instrument, and then into a rearward similarly disposed keeper 7 arranged at a point approximately intermediate of the ends of the instrument, and thence is continued rearward through an opening 8 in a hand-grip 9 to which the rear terminals of the branches 10 of the jaw 2 are secured.

The branch 11 of the jaw 1 passes through the keeper 6 and is formed adjacent thereto with a hump or bend 12 constituting a spreader, and thence is extended through the keeper 7 and through the opening 8 in the hand-grip 9, the ends of the two branches 5 and 11 being twisted together to provide a handle 13.

The branches 10 of the jaw 2 extend through the distenders 3, thence through the keeper 6 and are then crossed, the crotch 14 formed by the crossing of the two branches being disposed between the keeper 6 and spreader 12 so that the two branches are positively held from becoming uncrossed. The branches 10 are then carried rearward through the keeper 7, and their terminals are passed through orifices 15 in the hand-grip 9 and are bent around the same, as shown at 16, thereby securely assembling the parts.

It will be noted that by the manner of disposing of the terminals of the two jaws, there are no projecting parts presented that might lacerate or otherwise injure the animal being operated upon.

In operating the instrument, the hand-grip 9 is pushed toward the jaws, whereupon the jaw 2 will be projected to the position shown in full lines in Fig. 2. In this movement the jaw 2 is moved laterally away from the jaw 1, thereby providing ample space between the two jaws to receive the head of the fetus. As soon as the jaws are properly positioned, the hand-grip 9 is drawn toward the handle 13, thereby causing the eyes 3 to contract the jaw 2 and grip it around the part presented. On the retrograde movement of the jaw 2, it is caused to approach or move toward the jaw 1, thereby to press the head of the fetus against the latter jaw thus to insure the proper gripping action.

It will be observed by reference to Fig. 3



that the curved sides 17 of the jaw 2 project laterally some distance beyond the eyes 3 when the jaw is retracted, the same being also true to a greater extent when the jaw is projected. The object of this arrangement is to prevent the eyes 3 from contacting with the walls of the vaginal canal when the instrument is introduced, thus to avoid possible injury to this part. The hump 12 also performs an additional function aside from that of a spreader for the branches 10 of the jaw 2, namely, that of preventing the flesh of the canal from being caught and drawn between the crotch formed by the crossed branches 10, with the danger of laceration.

The improvements herein described are simple in character, but will be found thoroughly efficient for the purposes designed, and will operate in a positive manner to secure the objects sought.

What is claimed is:—

1. An obstetrical instrument embodying two jaws both of which are transversely bowed and project at an obtuse angle to the length of the instrument combined distenders and contractors carried by one jaw through which the other jaw projects, a keeper and a spreader carried by the first-named jaw and with which the last-named jaw coacts.

2. An obstetrical instrument embodying two jaws both of which are transversely bowed and project at an obtuse angle to the length of the instrument one of which is rigid and the other flexible, combined distenders and contractors carried by the rigid jaw and with which the flexible jaw engages, a keeper and a spreader carried by the rigid jaw and with which the flexible jaw coacts.

3. An obstetrical instrument embodying a rigid and a flexible jaw, the latter having crossed branches, both of the jaws being transversely bowed and disposed at an obtuse angle to the length of the instrument, means carried by the rigid jaw to expand and contract, and to cause the flexible jaw to move toward and away from the same, a keeper through which the branches pass, and means adjacent to the keeper to hold the branches from uncrossing.

4. An obstetrical instrument comprising a rigid jaw formed with terminal eyes and having branches, one of which is provided with a keeper and the other with a hump adjacent to the keeper, and a flexible jaw having crossed branches passing through the eyes and the keeper and disposed on opposite sides of the hump.

5. An obstetrical instrument comprising a rigid jaw formed with terminal eyes and having branches, one of which is provided with two keepers, one disposed adjacent to the jaw and the other intermediate of the ends of the branch, and the other branch being provided with a hump disposed adjacent to and in alinement with the center of the outer keeper, a flexible jaw having crossed branches passing through the eyes and the keepers and disposed on opposite sides of the hump, a handle carried by the branches of the rigid jaw, and a hand-grip carried by the branches of the flexible jaw.

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

WARREN M. THOMAS.

Witnesses:

PRESTON MARKWELL,  
LLOYD PATTERSON.