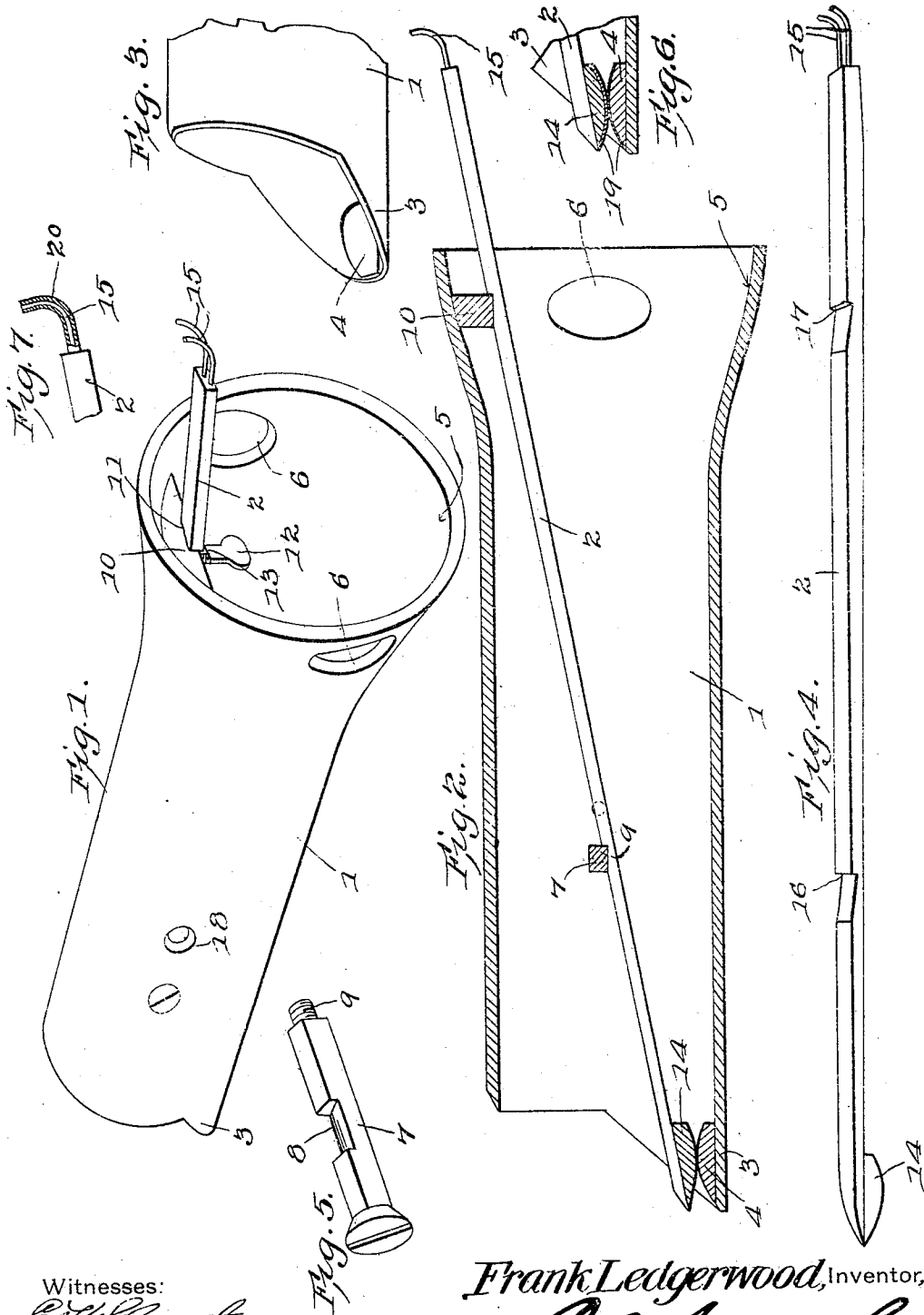


No. 812,349.

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F. LEDGERWOOD.  
OBSTETRICAL INSTRUMENT.  
APPLICATION FILED OCT. 27, 1905.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

FRANK LEDGERWOOD, OF GREENFIELD, IOWA.

## OBSTETRICAL INSTRUMENT.

No. 812,349.

Specification of Letters Patent.

Patented Feb. 13, 1906.

Application filed October 27, 1905. Serial No. 284,738.

*To all whom it may concern:*

Be it known that I, FRANK LEDGERWOOD, a citizen of the United States, residing at Greenfield, in the county of Adair 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 of the class employed in delivering pigs.

The object of the invention is to provide a novel instrument of the character stated, in the use of which pigs may be safely, painlessly, and quickly delivered irrespective of the character of the presentation.

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 perspective view of the instrument. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a fragmentary detail view in perspective of the front of the instrument. Fig. 4 is a perspective detail view of the clamping-lever. Fig. 5 is a perspective detail view of a fulcrum-bar used in conjunction with the instrument. Figs. 6 and 7 are detail sectional views of slightly-modified parts of the instrument.

The implement embodies a tube or body 1 and a lever 2. The tube, which may be made of any suitable material, is provided at one end with a lip or extension 3, with the upper inner face of which is combined a rounded lug 4, forming a gripping member, the other end of the tube being enlarged or bell-mouthed, as shown at 5, and provided on opposite sides with finger-holds 6.

Arranged within the tube near its forward end or that carrying the lip is a fulcrum-bar 7, the intermediate portion of which is provided with a seat 8, which when the fulcrum is positioned, as shown in Fig. 2, is disposed on the under side of the bar. The intermediate portion of the fulcrum-bar is herein shown as rectangular in cross-section, and one end is provided with a nicked tapered head and the other end with a reduced threaded extension 9, which is adapted to engage one of a series of threaded orifices in the tube.

Located at the enlarged end of the tube

and on the inner side thereof is an abutment 10, provided intermediate of its ends with a seat 11, and combined with the abutment is a thumb-screw 12, having a shoulder 13, adapted to engage with the lever when positioned as shown in Fig. 1.

The lever 2, which may be made of any suitable material, preferably of a non-oxidizable metal, is provided at one end with a rounded lug 14, that corresponds to the lug 4 on the tube and constitutes a gripping member at its other end with a pair of hooks 15 and intermediate of its ends on its upper side with two stops 16 and 17, which are adapted to interlock, respectively, with the wall of the fulcrum 7 and of the abutment 10, as clearly shown in Fig. 2, thereby to limit the insertion of the lever so as to cause the two gripping members 4 and 14 to occupy the proper operative relation to each other.

In order to vary the power of the lever to meet emergencies that might arise, the fulcrum, as stated, is adjustable relatively to the tube, this being effected by providing the plurality of orifices 18, which are engaged by the fulcrum. It is to be understood that the screw-head of the fulcrum will lie flush with the exterior of the tube, thus to obviate the presentation of obstructions that would be objectionable and dangerous. As herein shown, there are but two of the orifices 18; but it is to be understood that this number may be increased, if found necessary or desirable, and still be within the scope of the invention.

In use of the instrument grease is applied to the exterior of the tube, after which it is positioned, care being taken to bring the lip 3 under the pig's lower jaw, with the gripping member 4 disposed at an angle thereto. The lever is then inserted in the tube beneath the fulcrum 7 and in the seat 8 and is pushed forward until the stop 16 engages the rear wall of the fulcrum, which will indicate that the gripping members are operatively positioned relatively to each other, the walls of the seat 8 preventing any lateral movement of the lever. When the lever is thus adjusted, the gripping member 14 enters the pig's mouth and bears upon its tongue, and upon upward pressure being applied to the lever the two gripping members approach each other, and thus occupy the indentation formed by the crest or angle of the lower jaw-bone. When the lever has been moved until it engages with the seat 11, the stop 17 then engages

with the rear face of the abutment 10 and is thereby positively held against any forward movement. When this adjustment has been secured, the thumb-screw 12 is turned and the shoulder 13 thereon locks the lever in the seat of the abutment. The fingers of the operator are then inserted through the opening 6 and the tube is withdrawn. In case of leg presentation the same procedure is observed as that above described except that the lever is reversed and the hooks 15 then come into play, which are shaped so as readily to fit over any joint of the pig's leg without injuring it.

While the implement herein described is simple in character, it will be found thoroughly efficient for the purposes designed and may be employed with perfect safety by others than a skilled operator.

In order to obviate any possibility of injuring the pig, the opposed faces of the gripping members 4 and 14 may be faced with rubber or any other suitable yielding material, as shown at 19 in Fig. 6, and the hooks 15 may be similarly protected by a sheathing of rubber 20, as shown in Fig. 7.

Having thus described the invention, what is claimed is—

1. An instrument of the class described embodying a tube having at one end a gripping member, a fulcrum arranged in the tube, and a lever adapted to engage with the fulcrum and provided at one end with a gripping member to coact with that of the tube.

2. An instrument of the class described comprising a tube provided at one end with a lip, a lug combined with the inner face of the lip and constituting a gripping member, a fulcrum arranged within the tube, a lever adapted to engage the fulcrum and provided at one end with a lug constituting a gripping member to coact with that of the lip, and means for locking the two gripping members in operative relation to each other.

3. An instrument of the class described comprising a tube provided at one end with a lip carrying a rounded gripping member, and at its other end an abutment provided with a seat, a fulcrum disposed intermediate of the

ends of the tube and provided on its under side with a seat, a lever adapted to engage the seats of the fulcrum and the abutment and provided at one end with a rounded gripping member to coact with that of the tube, and means for holding the lever in locked engagement with the abutment.

4. An instrument of the class described comprising a tube provided at one end with a gripping member and at its other end with an abutment provided with a seat and with finger-holds, a lever adapted to engage the seats of the fulcrum and abutment and having stops to coact therewith to prevent longitudinal movement, a rounded gripping member carried by the lever and adapted to coact with that of the tube, and means for locking the lever in the seat of the abutment.

5. An instrument of the class described comprising a tube provided at one end with a rounded gripping member, an adjustable fulcrum combined with the tube, and a lever adapted to coact with the fulcrum and provided at one end with a rounded gripping member to coact with that of the tube.

6. An instrument of the class described comprising a tube provided at one end with a gripping member, a fulcrum arranged in the tube, and a lever adapted to engage the fulcrum and provided at one end with a gripping member to coact with that of the tube and at its other end with hooks.

7. An instrument of the class described comprising a tube provided at one end with a gripping member, a fulcrum arranged in the tube, and a lever adapted to engage the fulcrum and provided at one end with a gripping member to coact with that of the tube and at its other end with hooks, the opposed faces of the gripping members and the hooks, being covered by yielding material.

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

FRANK LEDGERWOOD.

Witnesses:

GEO. D. MUSMAKER,  
H. J. CHAPMAN.