

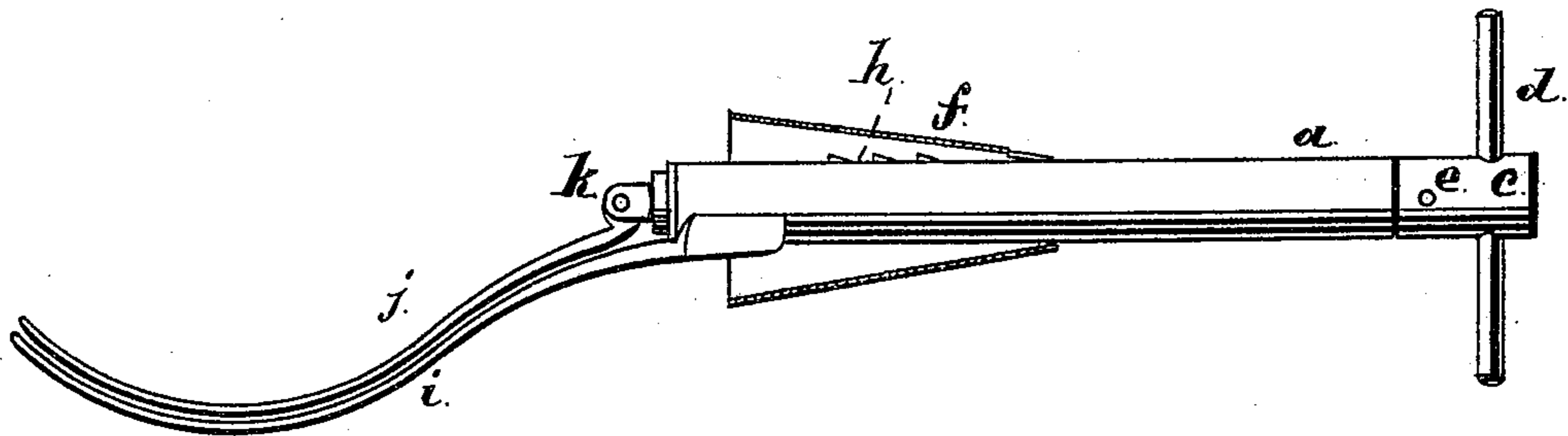
(No Model.)

A. MILLER.  
OBSTETRIC FORCEPS.

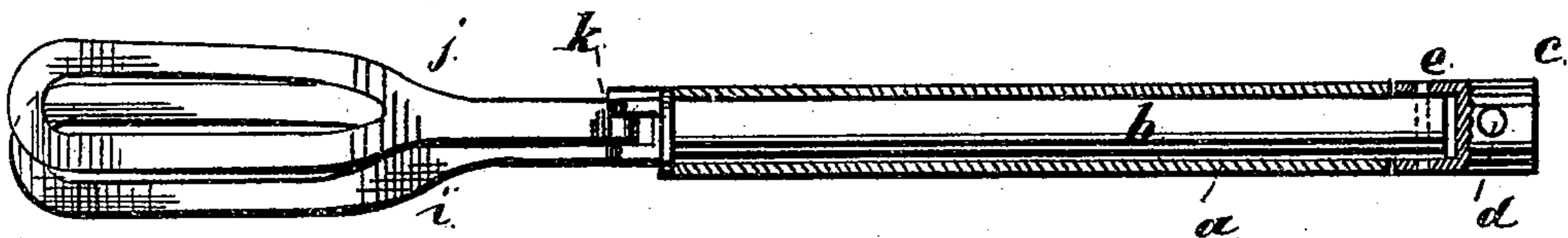
No. 249,073.

Patented Nov. 1, 1881.

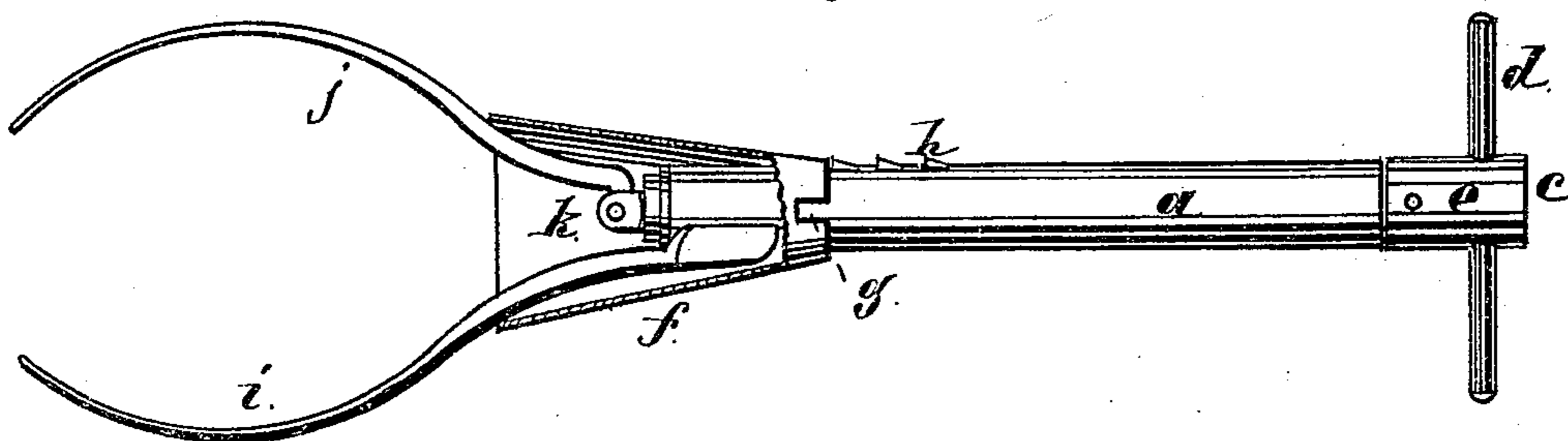
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:

Albert H. Adams.

Edgar T. Bond

Inventor:

Adam Miller

# UNITED STATES PATENT OFFICE.

ADAM MILLER, OF CHICAGO, ILLINOIS.

## OBSTETRIC FORCEPS.

SPECIFICATION forming part of Letters Patent No. 249,073, dated November 1, 1881.

Application filed August 1, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ADAM MILLER, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented new and useful Improvements in Obstetric Forceps, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a side view, showing the jaws closed for insertion and the fastening device in section; Fig. 2, a top view with the exterior cylinder in longitudinal section; Fig. 3, a side view, showing the jaws revolved or opened and the lock applied.

The object of this invention is to provide improved forceps for obstetric purposes. This I accomplish by the construction and arrangement of parts illustrated in the accompanying drawings, which I will now proceed to describe in detail, afterward pointing out in the claims the improvements constituting my invention.

In the drawings, *a* indicates the exterior shell or cylinder; *b*, the interior cylinder or shaft, which may be a solid rod; *c*, the end cap; *d*, the cross head or handle; *e*, a pin or screw for securing the cap to the shaft *b*; *f*, the lock; *g*, a notch or opening in the locking-slide, by which the locking projections or stops are passed; *h*, locking projections or stops; *i*, the fixed jaw; *j*, the hinged jaw; and *k* the hinge or joint.

The instrument is made of the proper size for the purposes of its use, and is shown at or about one-half full size. It is made of brass or other suitable material, and its exterior may be nickel or silver plated. The cylinder *a* and the jaw *i* are firmly connected together. The shaft *b* fits into the cylinder *a*, so as to revolve or turn therein. The jaw *j* is jointed to the end of this shaft by a suitable joint, *k*, which leaves the jaw free to move back and forth in one direction, while it holds the jaw so as to change its position when the shaft *b* is turned. At the other end of the shaft *b* the cap and handle *c d* are attached by the pin or screw *e*. This gives the instrument a more finished appearance; but by placing the handle *d* so that it will come against the end of the cylinder *a* the handle may be inserted in the place of the pin *e*, and thus dispense with the cap *c*. The slide *f* is made circular, but its enlarged end may be made oval or somewhat flattened at

the sides. The end which fits the tube or cylinder *a* is provided with an opening or notch, *g*, by which the stops *h* may be passed, so that by a slight turn in either direction it may be locked or held against either of the stops, the form of the slide being such that it will turn over any stop or stops not passed. By this arrangement the jaws can be made to fit the object between them, and be firmly held in the position at which they are placed when the movement of the slide is stopped, and will not open when pulled. The jaws *i* and *j* are best made in the form shown, and it will be understood that their edges and outer ends are to be rounded off, so as not to present any angular, rough, or cutting edges.

In use the instrument is to be inserted when closed, as shown in Fig. 1. The jaw *j* is then rotated by the handle into the position shown in Fig. 3, and as the jaw is hinged it is free to follow the easiest passage around to position, and to rest easily in position. When in proper position the slide *f* is advanced so as to come in contact with the jaws, and it is then by a slight turn locked in one of the stops *h*, when it is ready for its final use. The advantages of this instrument will be apparent from its construction and operation, for it will be seen that it can be applied without pain or terror and without injury, and can be used as an aid in parturition without danger, and without waiting as a last resort.

I do not broadly claim obstetric forceps provided with a rotating or revolving jaw; but

What I claim as new, and desire to secure by Letters Patent, is as follows:

1. The cylinder or tube *a*, having a fixed jaw, *i*, in combination with the rotary shaft *b*, having a hinged jaw, *j*, substantially as and for the purpose described.

2. The combination of the tube or cylinder *a*, having the jaw *i*, with the rotary shaft *b*, rotary hinged jaw *j*, and the adjustable locking-slide *f*, substantially as specified.

3. The combination of the cylinder or tube *a* and fixed jaw *i*, with the shaft *b*, hinged jaw *j*, slide *f*, stops *h*, and handle *d*, all constructed and operating substantially as set forth.

ADAM MILLER.

Witnesses:

L. L. BOND,

ALBERT H. ADAMS.