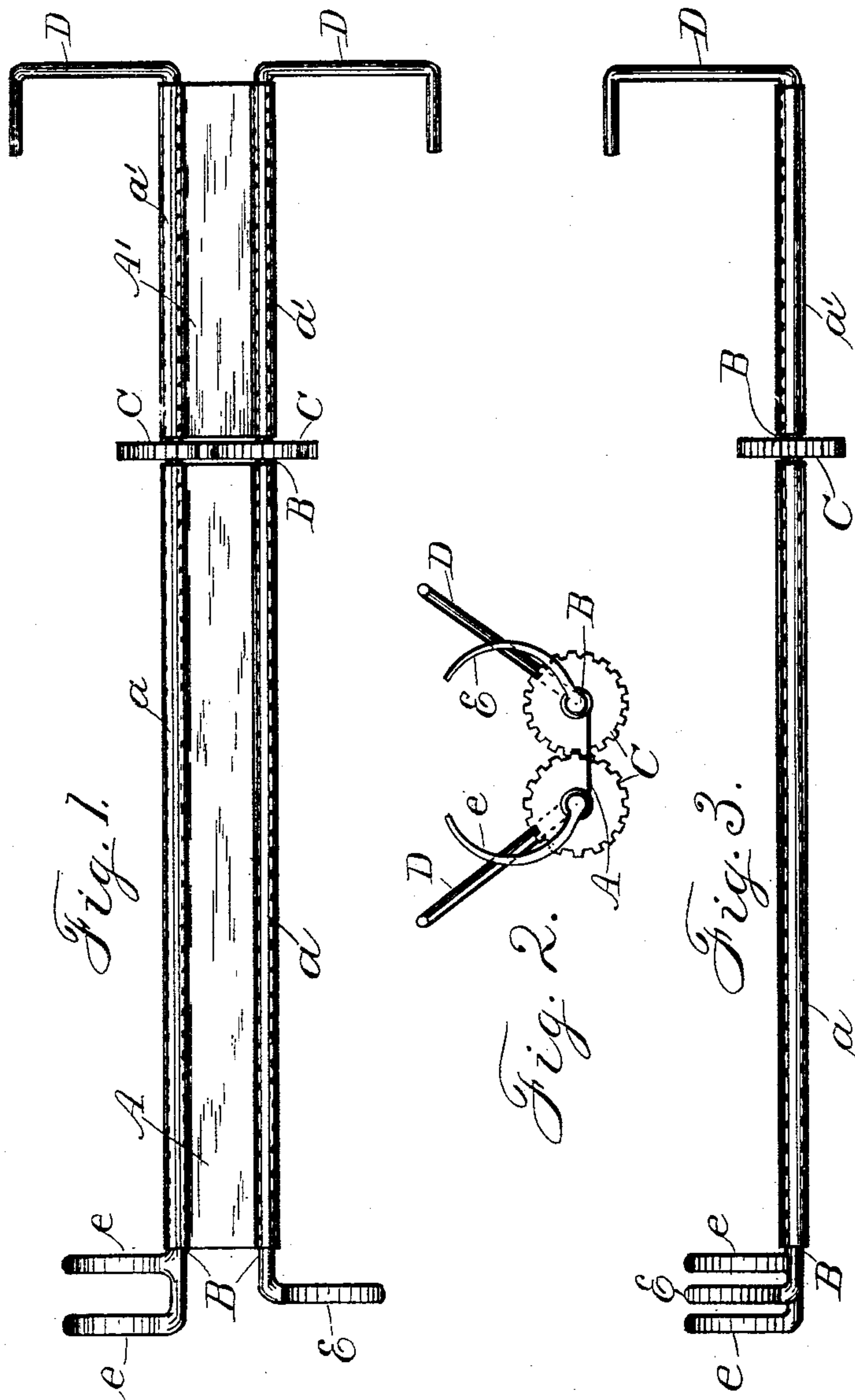


No. 751,656.

PATENTED FEB. 9, 1904.

H. E. KOCH.  
OBSTETRICAL FORCEPS.  
APPLICATION FILED JULY 9, 1903.

NO MODEL.



Witnesses

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# UNITED STATES PATENT OFFICE.

HENRY E. KOCH, OF HARTINGTON, NEBRASKA.

## OBSTETRICAL FORCEPS.

SPECIFICATION forming part of Letters Patent No. 751,656, dated February 9, 1904.

Application filed July 9, 1903. Serial No. 164,828. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY E. KOCH, a citizen of the United States, residing at Hartington, in the county of Cedar and State of Nebraska, have invented new and useful Improvements in Obstetrical Forceps, of which the following is a specification.

My invention has relation to surgical instruments, and particularly to those used in obstetrics. It is designed for general use, but is especially adapted to be employed in the parturition of sows and other of the lower animals.

The accompanying drawings illustrate a preferred form of the invention in detail, in which—

Figure 1 is a plan of the device with its jaws open. Fig. 2 is an end elevation, and Fig. 3 is a side view, with the jaws closed.

Letters of reference indicate the various features of the invention, similar letters denoting corresponding parts in the several views.

As shown in the drawings, the letters A and A' indicate the two members of which I prefer to make the body of my forceps. These members are flattened and made of any preferred light and strong material. At the sides of each member A A' are formed the lateral tubes *a a'*, extending from end to end of the two members of the body. These tubes are adapted to receive loosely the rods B B, each one of which passes through a tube on the side of each member of the body. The adjacent ends of the two members A A' are separated sufficiently to receive between them twin cog-wheels C C, which are fixed one on each rod B and directly engaging each other. At the outer end of the body member A' the rods B are bent to form hand-levers D D, and at the outer end of the body member A one of said rods is provided with a single curved flattened jaw E, and the other of said rods is

provided with two curved flattened jaws *e e*. These jaws are so disposed with reference to each other that when closed the single jaw E enters between the two jaws *e e*. The jaws are operated by the movements of the hand-lever D D. The wheels C C secure a uniform movement and pressure of the jaws even when only one of the jaws is moved.

It is evident that the member A' of the body may be omitted, in which event the member A should be made longer, so that the cog-wheels will be nearer the levers D D than as shown. It is only important that the cog-wheels should not injure the animal nor interfere with the manipulation of the levers D D.

Having now described the invention, what I claim, and desire to secure by Letters Patent, is—

1. In a forceps having a flattened body, lateral tubes on each side of the body, rods adapted to loosely occupy said tubes, operating-levers on one end of said rods, cog-wheels fixed on said rods between an end of said body and said operating-levers, and jaws on the opposite ends of said rods as herein set forth.

2. A forceps having its body in two members, lateral tubes on each member, rods adapted to loosely occupy said tubes, cog-wheels fixed on said rods between the adjacent ends of said members, hand-levers on one end of said rods, a curved jaw on the opposite end of one rod and two curved jaws on the opposite end of the other rod, substantially as herein described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY E. KOCH.

Witnesses:

W. S. WESTON,  
GEO. BUTE.