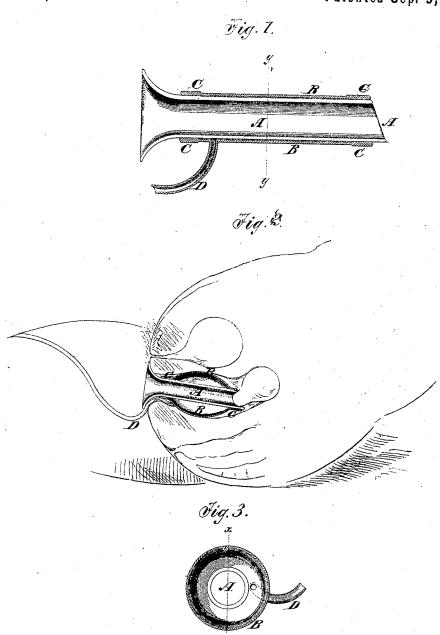
## 3.9. Bruce. Speculum Etherment. Patented Sep. 5, 1871.



Fristave Breterich.

**Inventor:** J. D. Gruce.

Per Muufe.
Attorneys.

## UNITED STATES PATENT OFFICE.

JEROME D. BRUCE, OF NEWBERRY, SOUTH CAROLINA.

## IMPROVEMENT IN SPECULUM ATTACHMENTS.

Specification forming part of Letters Patent No. 118,683, dated September 5, 1871.

To all whom it may concern:

Beitknown that I, Jerome D. Bruce, of Newberry, in the county of Newberry and State of South Carolina, have invented a new and useful Improvement in Speculum Attachment; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to a new and useful improvement in the well-known surgical instrument or appliance known as the speculum, for the examination of the uterus or neck of the womb; and consists in an attachment to the speculum of an elastic tube, so arranged that the tube may be distended after the speculum has been inserted into the vagina, thereby distending the parts and greatly facilitating the examination of the uterus, as will be hereinafter more fully described.

In the accompanying drawing, Figure 1 represents a longitudinal section of the speculum taken on the line xx of Fig. 3, with my improvement applied. Fig. 2 represents the instrument inserted and the elastic attachment distended with air. Fig. 3 is a cross-section of Fig. 1, taken on the line y y.

Similar letters of reference indicate correspond-

ing parts.

A is the speculum or reflector, constructed in the usual manner, being simply a tube of suitable diameter with a bell-shaped exterior end, with the interior surface covered with speculum metal and

highly polished. B is a tube of rubber or other elastic and air-tight material, attached air-tight to the speculum at each end, as seen at C C, either by reducing the diameter of the tube at the ends or by making the ends thicker and more rigid, or in any other manner, leaving the middle portion of the tube flexible, so that it may be readily distended with air, or by the introduction of gas, vapor, or liquid. D is a long but small flexible tube, which is attached to or connected with the tube B, as seen in the drawing. By means of this tube the operator forces, with his mouth or otherwise, air or liquid into the tube B, after the speculum has been inserted into the vagina, and distends it, as seen in Fig. 2.

By thus distending the vagina and the parts connected with the neck of the uterus, the examination of the latter organ is rendered much more perfect and satisfactory than it has been hereto-

fore

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The elastic tube B, applied to the part of a speculum that enters the vagina, as shown and described, so that a chamber may be formed around said speculum within the vagina by injecting air through tube D, as specified:

The above specification of my invention signed

by me this 30th day of May, 1871.

JERÓME D. BRUCE.

Witnesses:

T. B. Mosher, Geo. W. Mabee.