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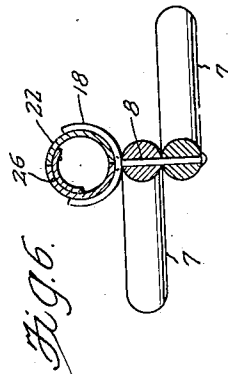
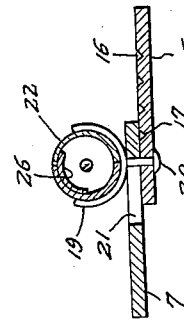
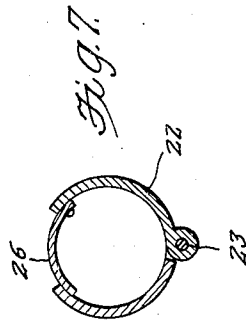
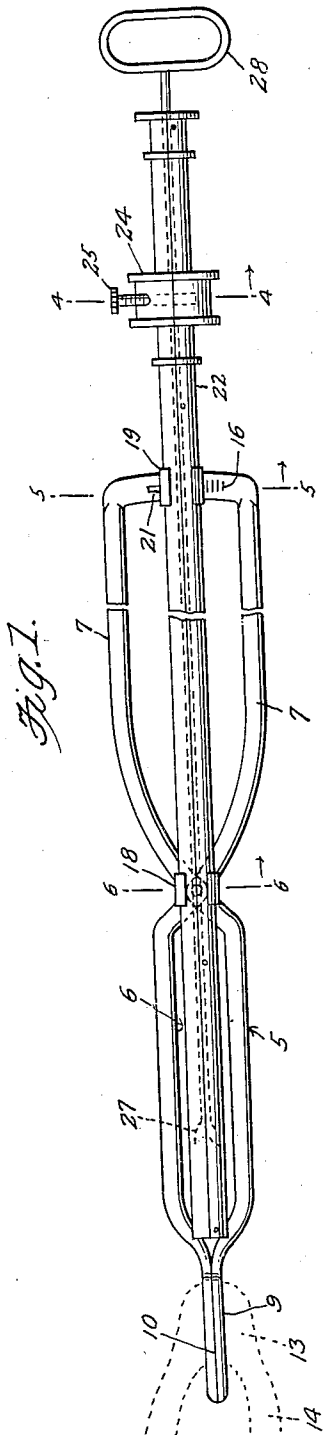
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2,435,531

COMBINATION UTERINE DILATOR AND GAUZE PACKER

Filed Oct. 8, 1945

2 Sheets-Sheet 1



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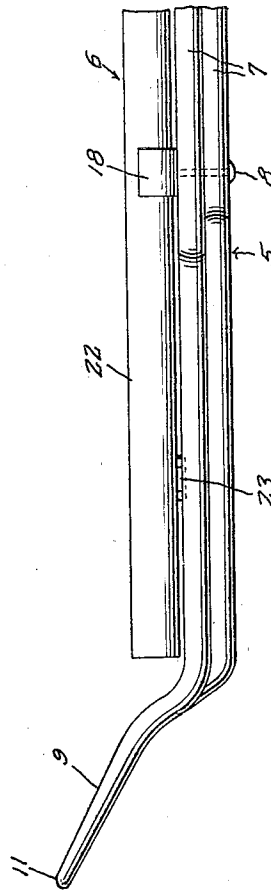
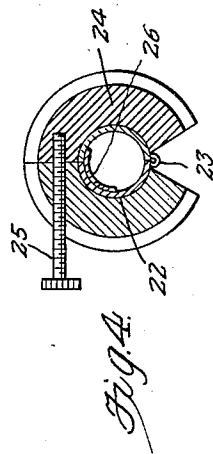
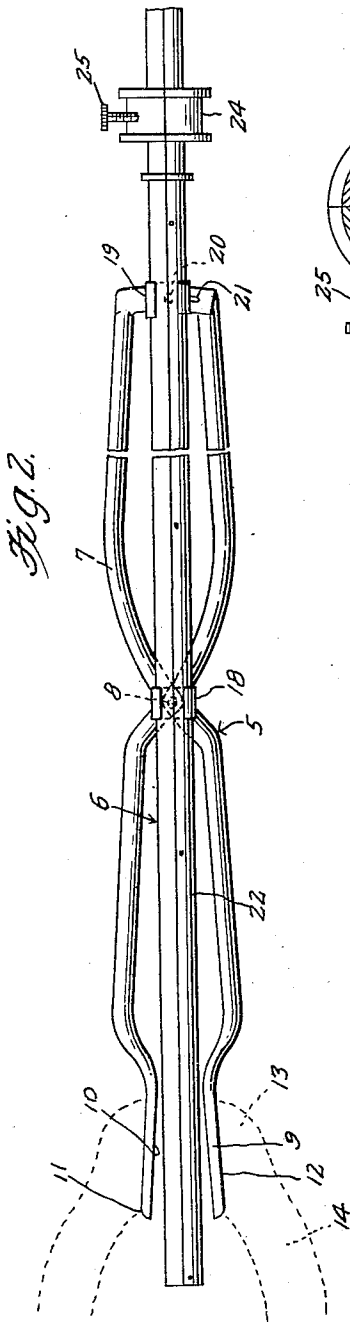
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UNITED STATES PATENT OFFICE

2,435,531

COMBINATION UTERINE DILATOR AND
GAUZE PACKER

Asa B. Carmichael, Sr., Tujunga, Calif.

Application October 8, 1945, Serial No. 621,129

1 Claim. (Cl. 128—345)

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The present invention relates to new and useful improvements in surgical instruments and more particularly to a combined uterine dilator and gauze packer.

An important object of the present invention is to provide a device of this character whereby a unitary instrument is provided and adapted for introduction in the cervical canal of the uterus for expanding the same together with a uterine packer by means of which a narrow strip of gauze may be forced into the uterus to control hemorrhages and for other purposes where a packer of this character is desired.

A further object of the invention is to provide a surgical instrument of this character embodying means whereby either of the instruments may be used independently of the other.

A still further object is to provide a device of this character of simple and practical construction, which is efficient and reliable in operation, relatively inexpensive to manufacture and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a plan view showing a device in closed position.

Figure 2 is a similar view showing the jaws of the dilator in open position.

Figure 3 is an enlarged fragmentary side elevational view of the front end of the instrument.

Figures 4, 5 and 6 are transverse sectional views taken respectively on the lines 4—4, 5—5 and 6—6 of Figure 1, and

Figure 7 is an enlarged transverse sectional view of the packer tube.

Referring now to the drawings in detail wherein for the purpose of illustration I have disclosed a preferred embodiment of the invention, the numeral 5 designates the dilator generally and the numeral 6 designates the gauze packer generally.

The dilator 5 comprises a pair of handles 7 arranged in side by side relation and pivotally connected to each other by means of a pivot pin 8. The front ends of the handles are formed to provide a pair of jaws 9 of semi-cylindrical form having flat opposed sides 10 positioned in confronting relation when the jaws are closed. The tips of the jaws are formed with semi-spherical heads 11 forming a ball when the jaws are closed and adapted to facilitate the entrance of the jaws

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into the canal 12 of the cervix or neck portion 13 of the body of a uterus 14 to thus dilate the neck of the uterus. The jaws 9 are curved upwardly, as shown more clearly in Figure 3 of the drawings, to more easily accomplish the introduction thereof into the uterus.

The rear ends of the handles 7 are formed with laterally inwardly projecting extensions 15 arranged in overlapping relation as shown more clearly in Figure 5 of the drawings, one of the extensions being formed on its upper surface with spaced notches 16 and the other of said extensions on its opposed face being formed with a lug or detent 17 adapted for selective engagement in the notches 16 to secure the jaws 9 in an adjustable open position.

A front arcuate clip or guide 18 is carried by the pivot pin 8 of the dilator and a similar guide 19 is carried by one of the extensions 15 by means of a pin 20 which is slidably received in a slot 21 of the other of said extensions.

The packer 6 comprises a longitudinally split tube 22 having its split sections hingedly connected to each other at one edge by means of a conventional form of hinge structure 23, the tube 22 being adapted for expanding and contracting movement by means of a transversely split collar 24 having its sections secured respectively to the sections of the tube and provided with a set screw 25 threaded through one of the sections of the collar and into the other section of the collar at its free edges, the manipulation of the screw serving to open and close the free edges of the collar and thus to likewise open and close the free edges of the tube 22 to expand the tube into the position as shown in Figure 7 of the drawings. A liner 26 is secured to one section of the tube 22 at its free edge for closing the edges of the section of the tube when in its expanded position.

In the operation of the device the jaws 9 of the dilator 5 are closed by the handles 7 as shown in Figure 1 of the drawings and then inserted in the neck 13 of the uterus. The handles 7 are then squeezed to spread the jaws 9 apart as shown in Figure 2 of the drawings whereby to expand or dilate the neck 13.

The tube 22 of the packer 6 is slidably carried in the guides 18 and 19 and is normally positioned with its front end behind the jaws 9 as shown in Figure 3 during the introduction of the jaws into the neck of the uterus. After the neck has been dilated by the jaws, the tube 22 is then moved forwardly in the guides to enter the uterus and the gauze contained in the tube is ejected

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into the uterus by means of a conventional form of plunger 27 operated by a handle 28 at the rear end of the tube.

It will be apparent either the dilator 5 or packer 6 may be used separately or in combination, when desired by removing the packer from the guides 18 and 19 or by mounting the packer therein.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the construction, operation and advantages of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claim.

What is claimed is:

A uterus dilator including a pair of handles having front end jaws adapted for insertion in the neck of the uterus, said handles being pivoted

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together for squeezing toward each other into different positions to variably open said jaws for dilating said neck, rear end lateral extensions on said handles in overlapping relation and provided with interlocking devices for selectively locking said handles in different positions, and a pair of front and rear resilient clips on said pivot and one of said extensions adapted to receive a gauze packer for insertion in said neck with said jaws.

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