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J. Q. JONAS

2,809,628

VAGINAL SPECULUMS

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FIG. 1

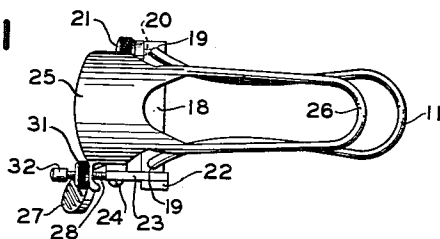


FIG. 2

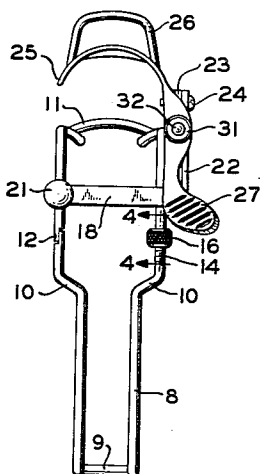


FIG. 3

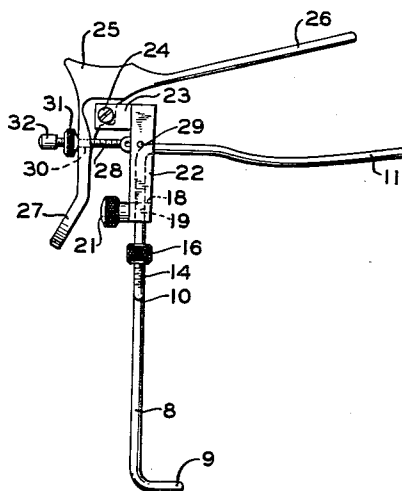


FIG. 4

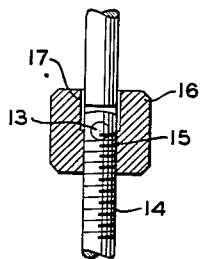


FIG. 5

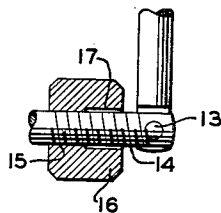


FIG. 7

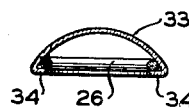
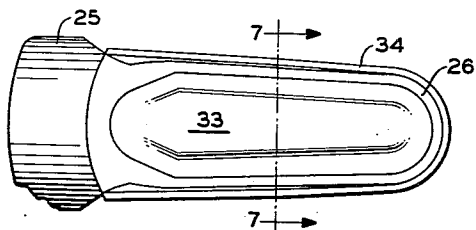


FIG. 6



INVENTOR.
JOSEPH Q. JONAS

BY

S. G. Cox
ATTORNEY

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Joseph Q. Jonas, New York, N. Y.

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3 Claims. (Cl. 128—17)

My invention relates to speculums and more particularly to that type of speculums known in the art as a vaginal speculum to be used diagnostically and as an aid in the treatment of diseases and various conditions found in the vagina and cervix.

Heretofore several instruments have been used for this purpose but all of them fail in many respects such as the complexity of construction resulting in obstruction of the area surrounding the instrument. Another disadvantage lies in the inability to thoroughly cleanse and sterilize instruments of the type heretofore manufactured.

One of the objects of my invention is the provision of an instrument wherein the depressors automatically separate the one from the other in perfect alignment.

Another object of my invention is the provision of an instrument whose parts are simple and so fenestrated that an unobstructed view and access to surrounding parts of the body may be accomplished while the instrument is in position.

Another object of my invention is to provide an instrument which may be used with the patient in an ordinary bed thus avoiding the necessity of removal to a special surgical table.

Other objects and advantages will be apparent from the specification and drawings in which:

Fig. 1 is a top view of the instrument;

Fig. 2 is an end view of the instrument;

Fig. 3 is a side view of the instrument;

Fig. 4 is a cross section of the handle locking device in locked position taken along 4—4 of Fig. 2;

Fig. 5 is a cross section of the handle locking device in unlocked position;

Fig. 6 is a bottom view of a modification of the instrument;

Fig. 7 is a view of the modification shown in Fig. 6 along line 7—7 of Fig. 6.

Referring to the drawings, 8 is the handle of the instrument, formed of heavy gauge wire or the like, terminating at one end in an inwardly bent finger hold 9. The handle 8 towards its upper end is bent outwardly and upwardly at 10 to form a widened upper portion then is bent inwardly to form a lower depressor 11. Above the outward bend 10 the handle is broken and swivel hinged at 12 and 13 and the portion of the handle below 13 is male threaded at 14 to accommodate the female threads 13 on lock sleeve 16 whose upper portion is unthreaded at 17 so that rotation of nut 16 on thread 14 causes the unthreaded portion 17 to slide over and embrace the swivel joint 13 preventing pivotal movement of the handle, when in such position.

The widened portion handle 8 above the bend 10 retains a cross bar 18 by means of orifices 19 drilled through the bar so that cross bar 18 normally may slide up and down the widened handle portion but is kept in perfect alignment on the widened handles because of the restriction of the handle acting as a guide for orifices 19. Bar 18 also at one side is female threaded at 20 to receive a knurled male threaded set screw 21 for the purpose of

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locking bar 18 at any desired position in its travel up and down the widened portion of handle 8.

Attached to or an integral part of bar 18 is parallel arm 22 terminating in a rearwardly disposed arm 23 to which in turn is pivotally attached by means of screw 24 the arched body portions 25 of upper depressor 26. Body portion 25 has a downwardly depending finger lever 27 which when forced inwardly causes the upper depressor 26 to move away from lower depressor 11 in an arc pivoting on pivot screw 24. For the purpose of maintaining the desired distance between depressors 11 and 26, I provide a threaded arm 28 pivoted at 29 and passing through an orifice 30 on the lever arm. Over the threaded arm 28 and on the outside of lever 27 I place a female threaded thumb screw 31 and thumb screw stop 32 so that clockwise or counter clockwise revolution of screw 32 causes it to travel along threaded arm 28 restricting or enlarging movement of finger lever 27 and through it restricting or enlarging the arcuate spacing of depressors 11 and 26.

Referring to the modification shown in Figs. 6 and 7 of the drawings, I provide a cover of clear plastic or other suitable material preferably arched, and which may be slipped over either of the depressors and held thereon by means of the inwardly turned ridge 34.

Operation

In ordinary operation, when the patient is able to be examined on the operating table, the lock sleeve 16 is rotated on threads 14 into a position where the handle is firmly locked in a straight line and cannot be swivelled on pivots 13. The depressors are inserted in the bodily cavity after which pressure upwards on bar 18 causes the depressors 11 and 26 to separate parallel the one with the other to any desired distance within the limits of travel of the bar 18. Further enlargement of the cavity is now made by depressing the finger lever 27 to the desired amount after which the opening may be retained by rotating thumb screw 31 on threaded arm 28 until screw 31 abuts on the depressed surface of finger lever 27 thereby retaining it in position.

It may now be seen that the cavity may be viewed and treated with ease because of the fenestrated form of depressors 11 and 26 and the tissue surrounding the cavity may also be examined and treated because of the fenestrated form of the handle 8. Should, however, a condition be found where there is a weakening of tissue in the cavity so that sag occurs between the loops of the depressor, the modified cover 33 may be inserted over the loops of the depressors, and held thereon by means of the inwardly turned ridge 34, for the purpose of providing a fine tissue support.

The arm 22 being disposed on only one side of the instrument permits insertion and removal of other surgical instruments or bandages into and out of the cavity and permits the removal of the speculum without the necessity of disturbing the other instruments inserted therein.

Should it be desirable to examine a patient in bed without removal to a special surgical table, the lock sleeve 16 is rotated counter clockwise on threads 14 to an unlocked position whereupon the handle 8 may be swiveled rearwardly on pivots 13 to the position shown in Fig. 5 and the instrument inserted as heretofore described without interference by the bed upon which the patient is supported.

Changes in my invention may be made by those skilled in the art without departing from the scope of my invention in which I claim:

1. In an instrument of the character described, a fenestrated body terminating at one end in a depressor and at the opposite end in a fenestrated handle, said handle being swiveled in proximity to its upper portion, a second fenestration

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trated depressor pivotally mounted and vertically slidable on said handle, a lever mounted on said second depressor for movement of said second depressor in an arc away from said first named depressor, and locking means attached to said handle for maintaining said lever in a predetermined position.

2. In an instrument of the character described, a fenestrated body terminating at one end in a depressor and at the opposite end in a fenestrated handle, said handle being swiveled in proximity to its upper portion, locking means to prevent swiveling of said handle, a second fenestrated depressor pivotally mounted and vertically slidable on the sides of said handle above said swivel, a lever mounted on said second depressor for movement of said second depressor in an arc away from said first named depressor and locking means attached to said handle for maintaining said lever and second depressor in a predetermined position.

3. In an instrument of the character described, a fenestrated body terminating at one end in a depressor and at the opposite end in a fenestrated handle, said handle being

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swiveled in proximity to its upper portion, locking means to prevent swiveling of said handle, a second fenestrated depressor pivotally mounted and vertically slidable on said handle above said swivel, a lever mounted on said second depressor for movement of said second depressor in an arc away from said first named depressor and locking means attached to said handle for maintaining said lever and second depressor in a predetermined position and cover means adapted to slide over and be joined to said depressors.

References Cited in the file of this patent

UNITED STATES PATENTS

15	206,162	Bradford	July 23, 1878
	430,350	McCully et al.	June 17, 1890
	519,623	Wertheimer	May 8, 1894
	693,345	Bearer	Feb. 11, 1902
	2,544,932	Marco	Mar. 13, 1951
20	2,661,735	Davis	Dec. 8, 1953