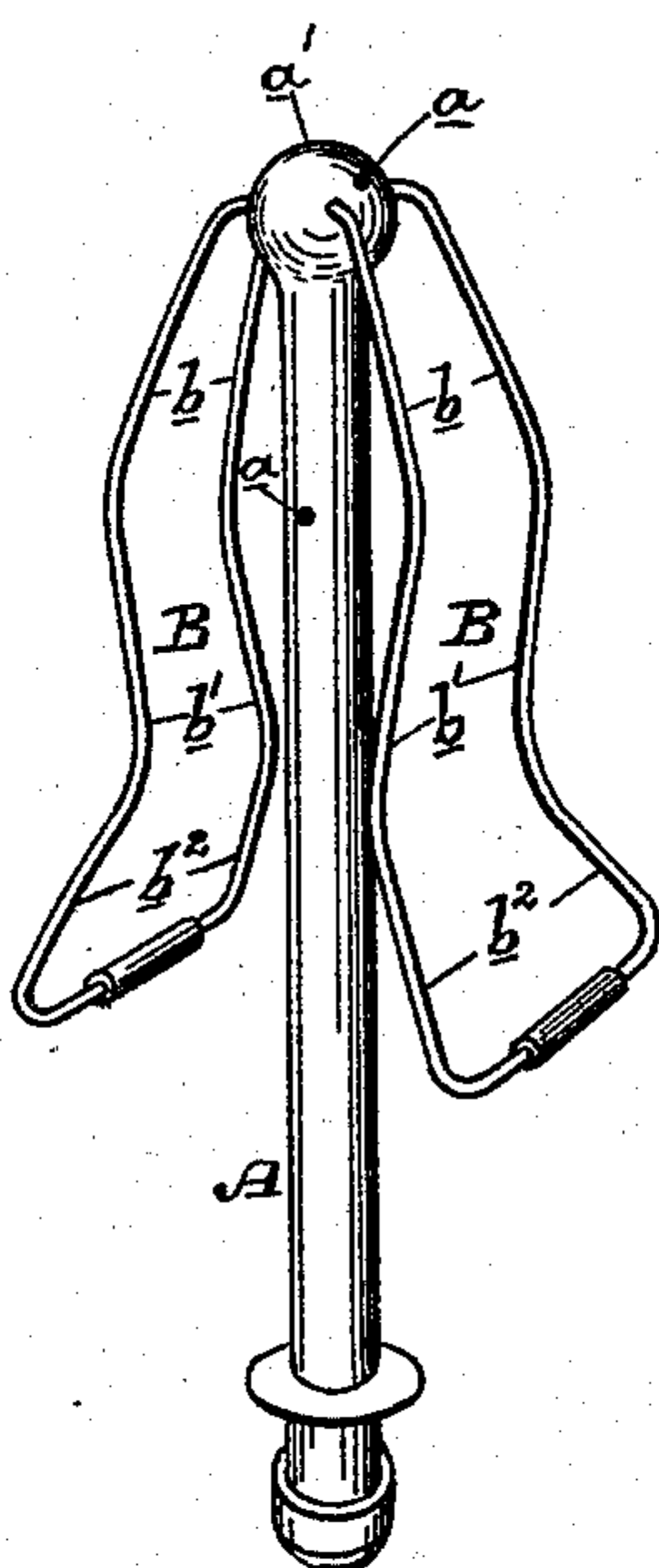


(Model.)

E. H. WOOLSEY.
SPECULUM IRRIGATOR.

No. 413,470.

Patented Oct. 22, 1889.



Witnesses,
Geo. H. Strong
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UNITED STATES PATENT OFFICE.

ELLIOTT H. WOOLSEY, OF OAKLAND, CALIFORNIA.

SPECULUM-IRRIGATOR.

SPECIFICATION forming part of Letters Patent No. 413,470, dated October 22, 1889.

Application filed April 6, 1889. Serial No. 306,233. (Model.)

To all whom it may concern:

Be it known that I, ELLIOTT H. WOOLSEY, of the city of Oakland, in the county of Alameda and State of California, have invented
5 an Improvement in Speculum-Irrigators for the Vagina and Rectum; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to that class of instruments or apparatus used for the treatment of the vagina and rectum in which a perforated nozzle or tip is attached to a syringe and is provided with a spring-frame, whereby the passages are expanded to permit inspection and the proper direction and
15 discharge of the washing-liquid.

My invention consists in the combination of the nozzle or tip with the novel expansion, limiting, and holding frame hereinafter fully
20 described, and specifically pointed out in the claim.

The object of my invention is to provide an instrument or apparatus of this class in which, by reason of the construction and shape of
25 the expansion-frame, the instrument may be readily and conveniently inserted in the vagina or rectum, limited in its insertion, held well in its place, readily withdrawn, and the walls of the passages expanded in proper
30 manner and places, so as to permit perfect inspection, as well as to aid in and allow free egress of water and discharges to effect the general irrigation and cleansing of said passages.

Referring to the accompanying drawing, the figure is a perspective view of my irrigator.

A is a nozzle or tip provided with discharge holes or perforations *a*, suitably arranged and disposed at different points. This nozzle or
40 tip is adapted to be connected with a syringe, usually the ordinary soft-rubber syringe, or the hose of a vaginal douche.

The expansion-frame consists of spring-wires B. These are connected at one end to
45 the end *a'* of the nozzle or tip, and they are arranged in pairs, the lower ends of each member of the pair being connected, thereby forming a frame, one on each side. The wires of these frames from their ends where they
50 are connected with nozzle or tip diverge from said nozzle or tip and from each other, as shown by letters *b*, and they then converge

or contract both toward the nozzle or tip and toward each other, as shown by the letters *b'*, whence they again diverge in all directions
55 to their lower ends *b*², which are entirely free of the nozzle or tip, and each frame is independent of the other. The merging of these several portions is effected by gentle curves, so as to present no obstructions. 60

In order to insert the instrument, the ends *b*² of the side frames are pressed inwardly toward the nozzle or tip, which is then introduced, the contracted or pressed-in frames
65 passing in readily. The distance of introduction or insertion is limited and defined by the divergent outer ends *b*² of the frames, which serve as stops, so that there is no danger of passing the instrument in too far. When properly in place, the ends *b*², which lie with-
70 out the orifice of the passage, are relieved of the pressure of the fingers, so that the frames expand. Their divergent portions *b*, within the passage, pressing against its walls, expand and hold them well open, their con-
75 tracted portions *b'*, pressing outwardly just within the orifice or mouth of the passage, serve as holds to keep the instrument in place, and their divergent outer ends *b*² serve as stops to limit the introduction of the in-
80 strument, and also to expand and keep expanded the orifice or mouth of the passage, which latter effect is all important to permit the most effective and ready egress of the washing water or liquid and the discharges. 85
Thus the entire passage is expanded, and the instrument, at the same time that it serves as an irrigator, serves also as a speculum to some extent, by means of which local treatment may be adopted both for the vagina and for
90 the rectum.

It will be seen that the instrument may be readily and easily introduced and will hold itself well in place, its lightness conducing to this result. There is no danger of inserting
95 it too far, and it may be easily withdrawn and without the slightest injury. The expanded free ends of the frames serving as stops, as already mentioned, have also the all-important function of keeping the orifice
100 itself open, and in this particular the instrument differs materially from those expansion-frames which have their wires at their outer ends curved inwardly to the nozzle. It dif-

fers, also, from those frames which have a continuous divergent shape, terminating at their outer ends in abrupt shoulders, which do not limit the introduction of the instrument nor
5 hold it in place, and which, if inserted too far, are difficult to remove, and produce injury in the attempt to remove them.

Having thus described my invention, what I claim as new, and desire to secure by Letter Patent, is—
10

In combination with the irrigating nozzle or tip, an expansion-frame composed of spring-wires secured at one end to the end of the nozzle or tip and having their other ends free,

said wires having divergent portions *b*, for
expanding the walls of the passage, convergent portions *b'*, serving as holds to keep the instrument in place, and divergent outer ends *b*², for limiting the insertion of the instrument
and holding the orifice or mouth of the passage open, substantially as described. 15 20

In witness whereof I have hereunto set my hand.

ELLIOTT H. WOOLSEY.

Witnesses:

W. L. PRATHER,
R. B. AYER.