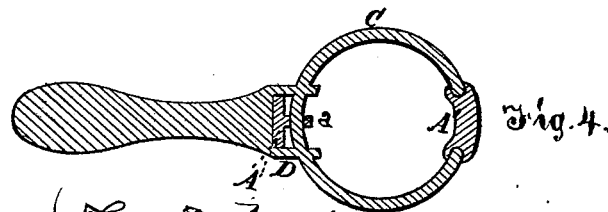
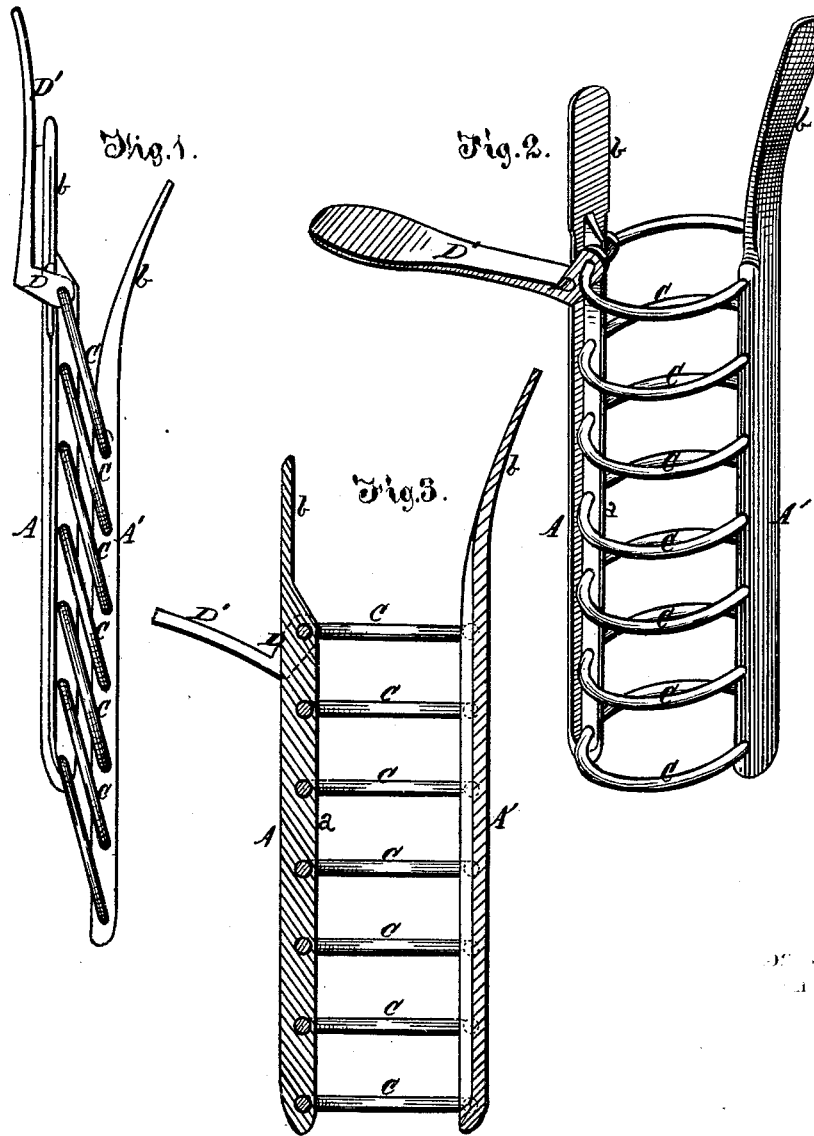


A. SHILAND.
Speculums.

No. 196,600

Patented Oct. 30, 1877.



Witnesses

Levi J. Knell
Arthur H. Mayo,
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Alexander Shiland
by his attorney
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Inventor.

UNITED STATES PATENT OFFICE.

ALEXANDER SHILAND, OF WEST TROY, NEW YORK.

IMPROVEMENT IN SPECULUMS.

Specification forming part of Letters Patent No. **196,600**, dated October 30, 1877; application filed March 30, 1877.

To all whom it may concern:

Be it known that I, ALEXANDER SHILAND, of West Troy, in the county of Albany and State of New York, have invented certain new and useful Improvements in Speculums, which improvements are fully described in the following specification and accompanying drawings, in which—

Figure 1 represents a side elevation of the instrument when closed. Fig. 2 is a perspective view of the same, illustrating the instrument when opened. Fig. 3 is a longitudinal sectional elevation. Fig. 4 is a cross-sectional view.

My invention relates to improvements in speculums; and consists in the employment of dilators, having a series of rings hinged thereto and set at intervals apart, in connection with a handle having ears straddling one of the dilators and pivoted to the upper ring, whereby the speculum can readily be expanded and contracted, as hereinafter more fully set forth.

In the drawings, A and A' represent bars employed to hold the distending-rings and operate the same. The said bars I denominate "dilators," which are made of narrow width, and with their outer sides of convex form in the cross direction and straight in their longitudinal direction, as shown. The dilator A has made with it, on its inner surface side, the rib *a*, pierced at intervals of about one-half of one inch, more or less, for receiving rings C. The dilator A' is made concave on its inner side, with the edges slightly thickened, and pierced to a distance of about one-sixteenth of one inch, at points corresponding with the holes in rib *a* of dilator A, for receiving the terminal ends of the rings C, as shown. Each dilator is provided with a handle, *b*, made solid with the same, as shown. The rings C C, I denominate the "distending-rings," which rings are pivoted to the dilators, as shown—that is, with their sides opposite their terminating ends with the rib *a* of dilator A, and the ends with the edges of the dilator A'. Being thus pivoted, the dilator A' will be prevented from shifting in position in relation with said rings,

and, at the same time, be firmly held from all lateral movement, and enable the said dilator, when rotated in either direction, to carry the rings simultaneously around.

To the upper ring of the series is firmly secured, by solder or otherwise, the ears of the clip D, which clip is made to straddle the dilator A at a point opposite the said upper ring, with the ears of said clip hugging the sides of said dilator, to prevent its shifting in either direction, while at the same time the said clip holds the lower end from vibrating or swinging when the instrument is being rotated. Made continuous with the said clip is the handle or lever D', which, when thrown up as in Fig. 1, will throw the ears of the said clip downward, and cause it to carry the upper ring, to which the said clip is secured, from positions shown in Figs. 2 and 3 to a closed position, as shown in Fig. 1; and when a reverse movement is given to the said lever or handle, to cause the said clip to throw upward, the said ring will also be carried upward and to a horizontal position.

It is apparent that when the said upper ring is thrown downward, as in position shown in Fig. 1, the dilator A' will be also carried downward and on the dilator A, together with all the rings in the series, folded down successively, one over the other, as shown; while, when the said ring is thrown in a horizontal position, it will carry the dilator A' away from dilator A, and raise the several rings to a horizontal position, as shown in Figs. 2 and 3.

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

The dilators A A', having a series of rings, C C, hinged thereto and set at intervals apart, in combination with the handle D', having ears D straddling the dilator A, and pivoted to the upper ring, substantially as described, and for the purpose set forth.

ALEXANDER SHILAND.

Witnesses:

B. W. E. SHAFER,
A. T. PHELPS.