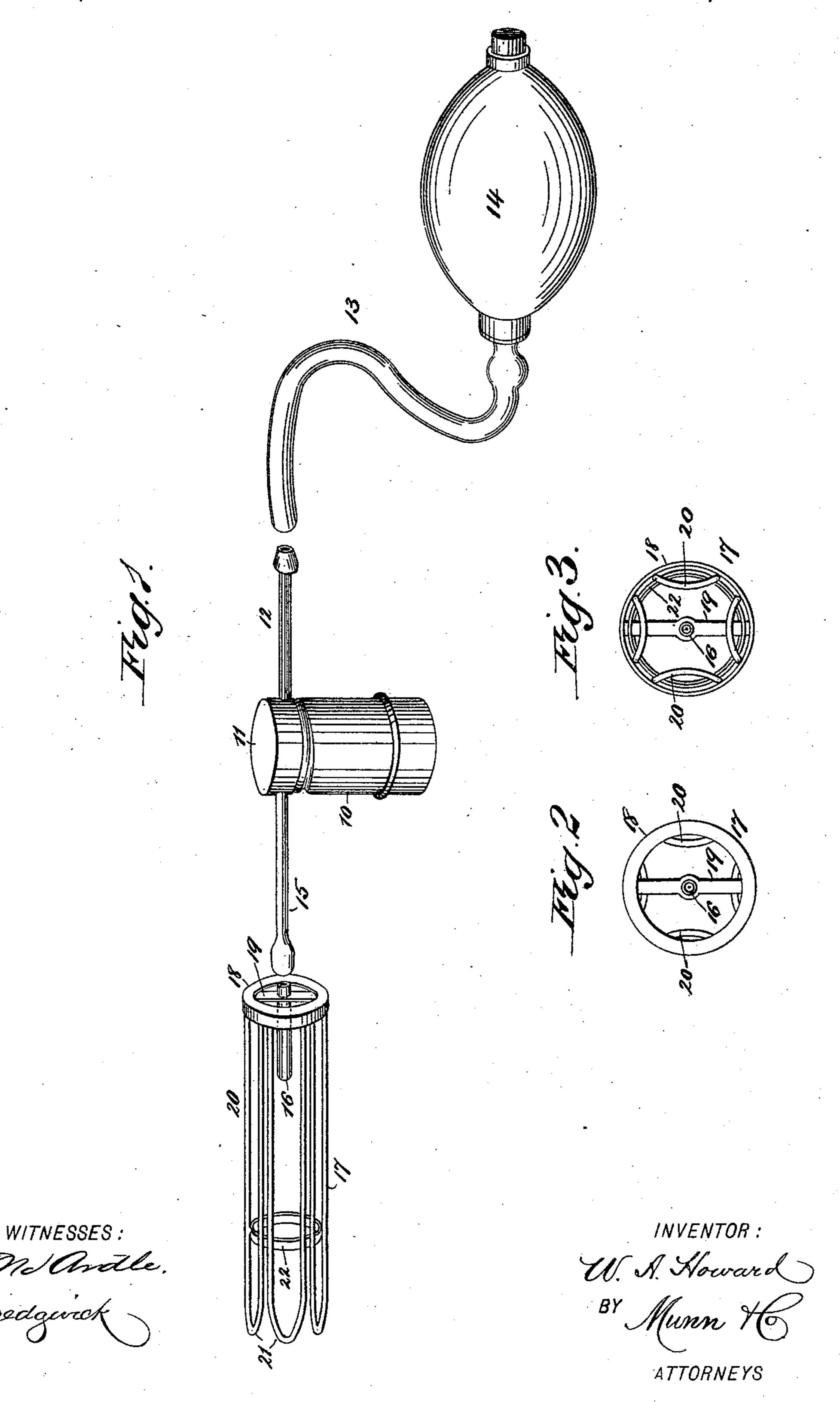
(No Model.)

W. A. HOWARD. VAGINAL INSTRUMENT.

No. 471,865.

Patented Mar. 29, 1892.



United States Patent Office.

WILLIAM A. HOWARD, OF CHICAGO, ILLINOIS.

VAGINAL INSTRUMENT.

SFECIFICATION forming part of Letters Patent No. 471,865, dated March 29, 1892.

Application filed July 24, 1891. Serial No. 400,578. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. HOWARD, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Vaginal Instruments, of which the following is a full, clear, and exact description.

My invention relates to improvements in vaginal instruments; and the object of my invention is to produce a simple device by means of which medicinal powders may be conveniently deposited upon the diseased surface of the vaginal cavity.

To this end my invention consists of a vaginal instrument the construction of which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar numerals of reference indicate cate corresponding parts in all the figures.

Figure 1 is a broken perspective view of the entire apparatus; Fig. 2, a rear end view of the dilator, and Fig. 3 a front end view of the same.

The powder-box 10 is provided with a removable cap 11, preferably a screw-cap, and the box is adapted to hold any kind of powder, according to the nature of the disease to be treated. Projecting from one side of the screw-cap is a pipe 12, which connects by a flexible tube 13 with the air-bulb 14, and extending from the opposite side of the cap is a pipe 15, adapted to connect with the nozzle 16 of the dilator 17. The dilator is adapted to hold the vagina open, so that the powder may be evenly distributed upon the membranes thereof, and it comprises an end base-

ring 18, a cross-bar 19, extending across the ring, the nozzle 16, supported in the cross-bar, the blades 20, formed of wire secured to the 40 base-ring and extending forwardly therefrom, said wires being doubled upon themselves at the front ends of the blades, as shown at 21, and the ring 22, which is attached to the blades and prevents their displacement. The 45 blades have dull points, which slightly converge, so that the dilator may easily enter the vagina without injuring the patient.

The operation of the apparatus is as follows: The dilator 17 is inserted in the vagina, so as 50 to hold it open, and the operator manipulates the air-bulb so as to pump air into the powder-box. The air eddies around in the box and passes out through the pipe 15 and nozzle 16, taking a portion of the powder with it 55 and depositing the same on the diseased surface of the vagina.

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

1. A vaginal instrument comprising a vaginal dilator having a nozzle therein, and a powder-blower coupled to the nozzle, substantially as described.

2. A vaginal instrument comprising a vagi- 65 nal dilator having a nozzle therein, an airbulb, and a powder-box having a pipe connecting with the dilator-nozzle and also a pipe connecting with the air-bulb, substantially as described.

WM. A. HOWARD.

Witnesses:

THOS. B. MITCHELL, LEWIS HARDER.