

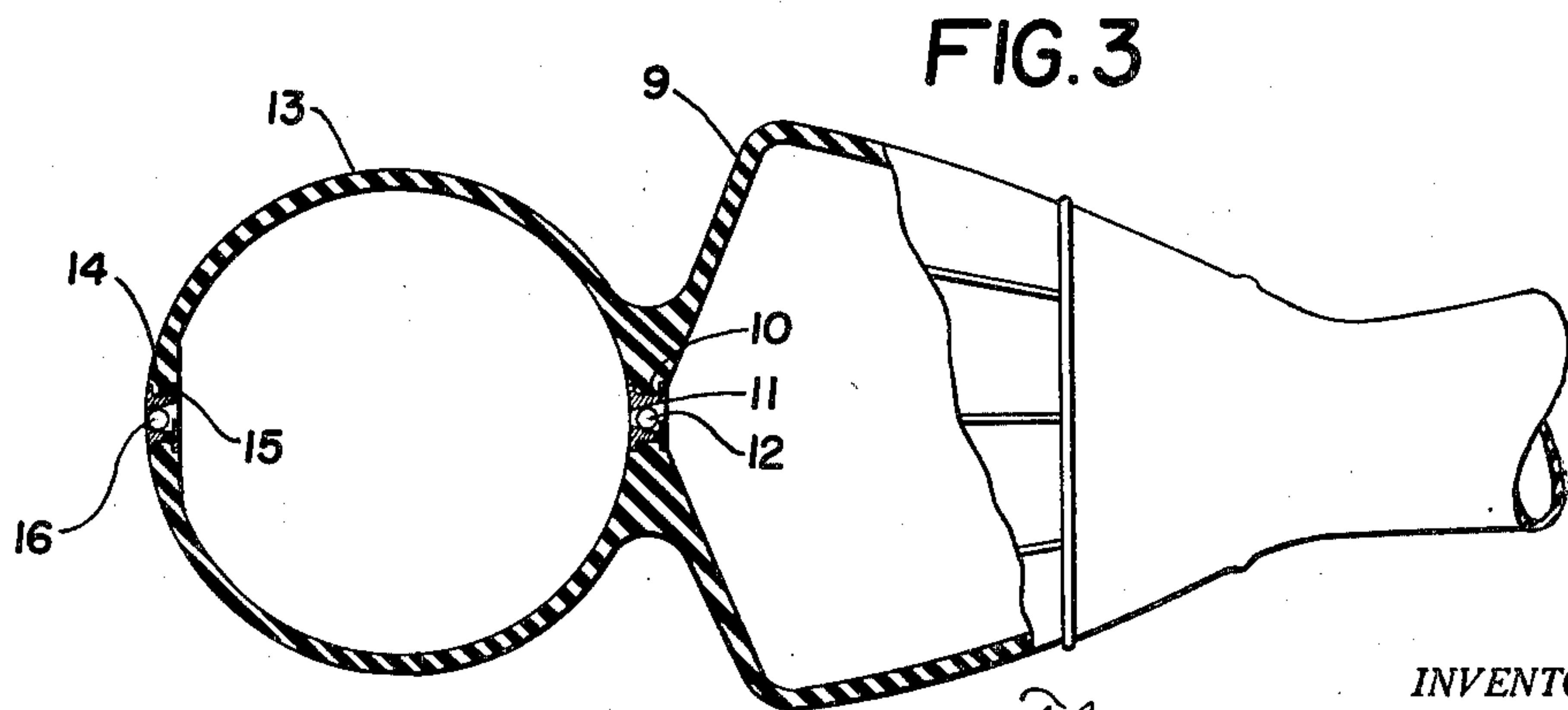
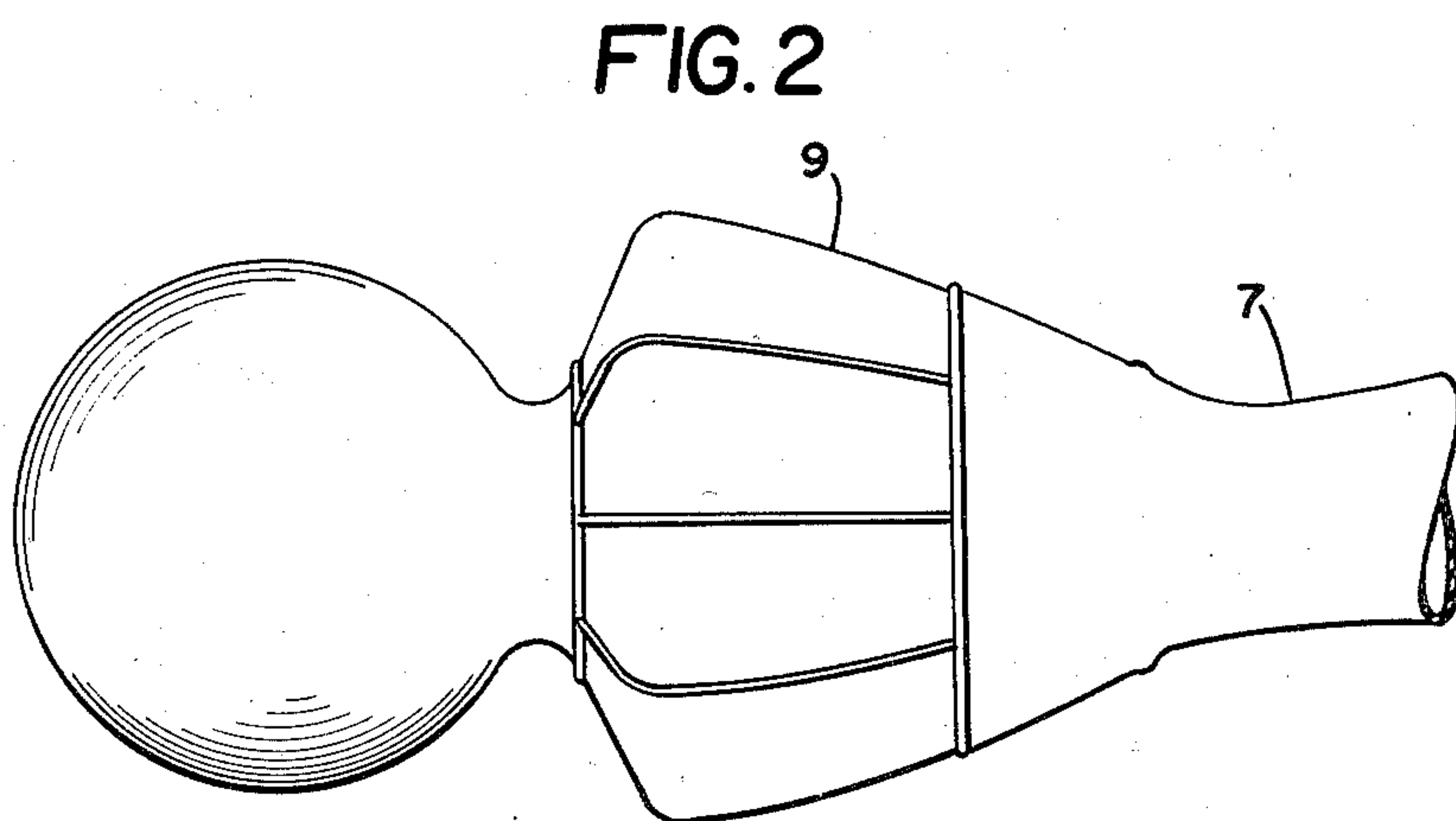
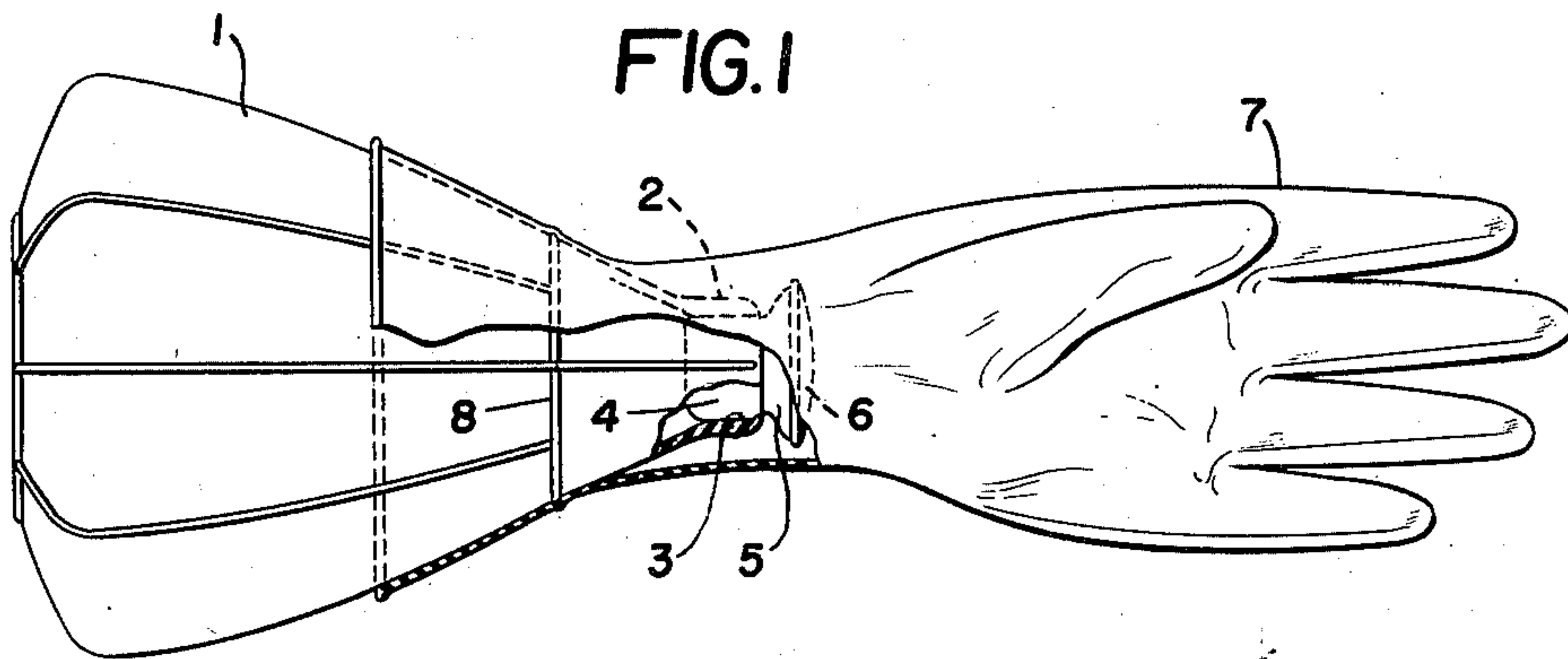
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GLOVE TESTING

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GLOVE TESTING

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This invention relates to glove testing and dusting.

A principal object of this invention is to provide a device and a method by which rubber gloves, such as the well-known surgeon's rubber gloves, may be tested for pin holes and at the same time be dusted with a powder over the entire inner walls thereof.

Other objects and advantages will appear as the description of the particular physical embodiment selected to illustrate the invention progresses and the novel features will be particularly pointed out in the appended claims.

In describing the invention in detail and the particular physical embodiment selected to illustrate the invention, reference will be had to the accompanying drawings and the several views thereon, in which like characters of reference designate like parts throughout the several views, and in which:

Fig. 1 is a side elevational view of a device embodying my invention with a rubber glove to be treated in place thereon; Fig. 2 is a side elevational view of a device embodying my invention in a modified form with a fragment of a glove shown thereon; Fig. 3 is a view of the device as shown in Fig. 2 with some parts broken away to more clearly show the construction.

As is well known, it is quite essential that the rubber gloves used by a surgeon while performing a surgical operation must be entirely free from even small pin holes.

It is also well known that surgeons' rubber gloves must be thoroughly dusted on the inside before use.

My invention provides an extremely simple, inexpensive and easily operated device whereby by extremely simple manual movements a rubber glove may be simultaneously tested for pin holes through the walls thereof and also have the interior walls coated with a desired fine antiseptic powder.

In Fig. 1 numeral 1 designates a frusto-conical hollow body having walls of relatively thin elastic material, such as rubber. The body is formed into a neck 2 extending a short distance from the apex of the frustum. The neck 2 is formed with a through orifice 3. In this orifice 3 is placed the neck 4 of a nozzle 5 having a perforate end member 6. The neck 4 fits tightly within the orifice 3 so as to be retained therein by friction and the natural compression of the rubber neck.

The nozzle 5 may be easily pulled out of the orifice 3 and a powder dropped into the body 1 and then the nozzle returned to place.

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After powder has been placed in the hollow body or bulb 1, the wrist portion of a rubber glove 7 is drawn up over the smaller end of the frustum. It is drawn up tightly so as to make an air-tight joint between it and the body 1. In order to assist in holding the glove in place and in making the air-tight joint, a circumferential rib 8 is formed on the frustum in a plane parallel to the base of the frustum. When all of the parts are in position as shown in Fig. 1, with a proper talcum or any suitable antiseptic powder in the bulb 1, the bulb is squeezed and powder and air is driven into the glove 7. This serves to inflate the glove and to coat the entire inner walls with the powder. If any pin holes exist in the walls of the glove, then upon squeezing the glove it will not remain inflated.

The above described method and apparatus for testing and dusting a rubber glove is easily and quickly performed and requires no special skill or training.

The body 1 should be formed of such dimensions that even a glove with the largest wrist opening will adhere tightly to the outer walls thereof.

It may be that in some cases the amount of air obtained by one squeeze of the bulb 1 will not be sufficient to perform the necessary function. In such case the modified form as shown in Figs. 2 and 3 are used. The nozzle 5 with the neck 4 in the through orifice 3 will be used in the device of Fig. 2 just as in Fig. 1 and the glove 7 will be placed on the frusto-conical body 9 just as it is on bulb 1 as shown in Fig. 1.

The device of Figs. 2 and 3, as shown in particular in Fig. 3 is formed with an orifice 10 through the base of the frustum and in this orifice is positioned a valve seat 11 and a ball valve 12. As will be seen, the ball valve seats on the valve seat so that air may not flow out of the frustum 9 but air may flow into the hollow frustum 9.

Attached in any suitable manner, as by integrally, to the base of the frustum 9, is a bulb 13. The valve forms a seat 11, and ball 12 opens into the hollow bulb 13 so that upon squeezing hollow bulb 13, made of an elastic resilient material, such as rubber, air will flow into hollow body 9. In order to replenish the supply of air in 13 it is provided with a through orifice in which is a valve seat 15 and a ball valve 16 all so arranged that air may not pass out of bulb 13 to atmosphere but may enter bulb 13 around the ball 16. This construction provides a means whereby a plurality of squeezes may be given to bulb 13 so that a series of puffs of air may be forced into the frustum 9 and so into a glove

attached thereto so that even the largest glove may be fully distended with a sufficient air pressure to detect any possible pin holes.

Although I have particularly described one preferred embodiment of the idea of means underlying my invention and a modification thereof and explained my new and novel method, nevertheless I desire to have it understood that the forms selected are merely illustrative, but do not exhaust the possible physical embodiments of the idea of means underlying my invention.

What I claim as new and desire to secure by Letters Patent is:

1. A glove testing and powdering apparatus, including, in combination, a frusto-conical hollow bulb formed with an elastic resilient wall and a circumferential external rib in a plane parallel to the base of the frustrum, said bulb being formed with a short neck terminating at the apex of the frustrum, said neck being formed with a through orifice having its axis coinciding with the axis of the frustrum, a removable nozzle having a neck tightly fitting the said through orifice and formed with a perforate end wall whereby the bulb may have powder introduced therein and the wrist of a rubber glove stretched over the sloping face of the bulb and squeezing the bulb will introduce powder to all of the interior walls of the glove and force air into the glove to betray any pin holes in the wall of the glove by failure of the glove to remain inflated on squeezing.

2. A glove testing and powdering apparatus, including, in combination, a frusto-conical hollow body formed with a through orifice at the apex of the frustrum a removable nozzle having a neck tightly fitting the orifice whereby powder may be

introduced therein, said hollow body formed with an orifice in the base of the frustrum formed as a ball valve seat and a ball valve therein arranged to allow air to be forced into the body through the valve but resist flow of air out of the body through the valve, a hollow elastic resilient bulb formed integrally with the hollow body and projecting from the base of the frustrum, said orifice opening into the hollow of the bulb, said bulb formed with an orifice formed as a ball valve seat and a ball valve therein arranged to allow air to flow into the bulb but resist flow of air thereout.

3. The method of simultaneously testing for the presence of pin holes in the walls of a rubber glove and powdering the interior walls thereof which comprises introducing a stream of mixed air and powder into a glove while preventing escape of air through the open end wrist portion of the glove.

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