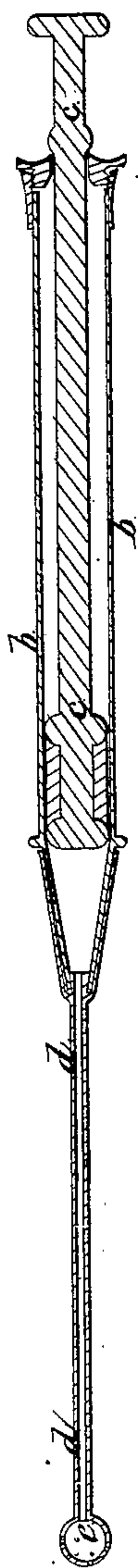


I. WARREN.  
SYRINGE.

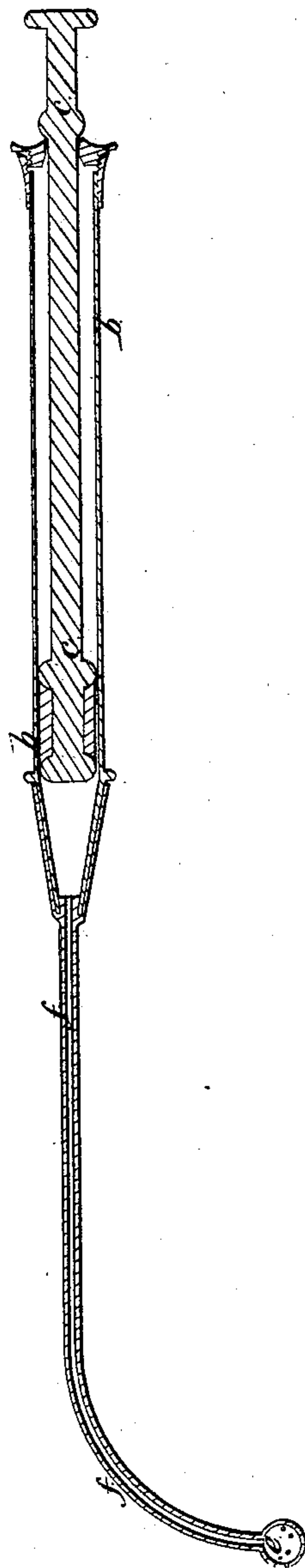
No. 10,303.

Patented Dec. 6, 1853.

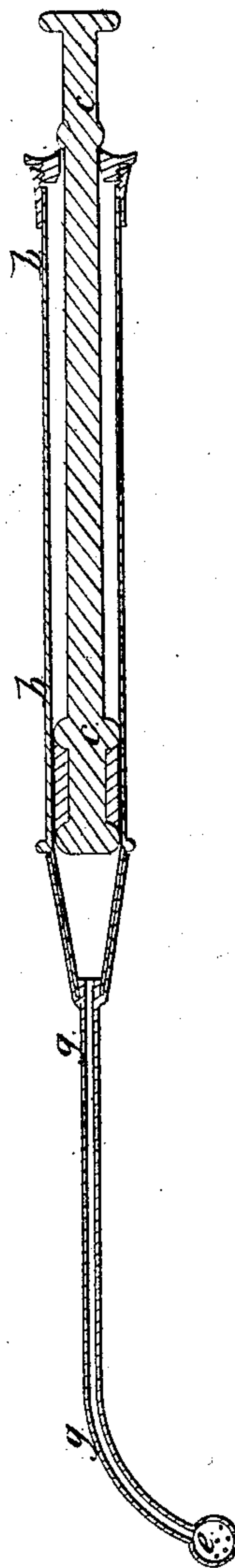
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



# UNITED STATES PATENT OFFICE.

IRA WARREN, OF BOSTON, MASSACHUSETTS.

## SHOWER-SYRINGE.

Specification of Letters Patent No. 10,303, dated December 6, 1853.

*To all whom it may concern:*

Be it known that I, IRA WARREN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and  
5 useful surgical instrument or shower syringe for the more efficacious and less painful use or topical medication as applied to the pharynx and air-passages, and that the following description, taken in connection  
10 with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said invention, by which it may be distinguished  
15 from others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The instrument which has hitherto been employed, consists of a piece of whalebone,  
20 bent at one end, to which is attached a small piece of sponge which is dipped in a proper solution and applied directly to the diseased part. But in cases where the parts are much inflamed, the muscles suffer great irritation from the sponge of the above instrument or "probang".

These defects I have remedied by my improved instrument, which consists of a syringe, to which is attached a tube, which  
30 may be bent or straight according to the purpose for which it is to be used, and having on its end a small hollow globe full of fine holes, through which can be ejected, by means of the syringe, a solution of nitrate  
35 of silver, or other proper substances, for the purpose of washing the sides of the pharynx, larynx &c.

The advantages of my instrument are that the bulb being small and smooth it  
40 can be introduced into an inflamed cavity causing much less irritation than the sponge of the "probang" and the muscles cannot cling to it upon its withdrawal.

My instrument also washes all sides of the  
45 cavity much better than the sponge, by jetting the contained solution in all directions,

while it will reach much farther than the probang with less suffering on the part of the patient.

The figures of the accompanying plate of 50 drawings represent the different forms of my instrument.

Figure 1 is a central longitudinal section of the pharyngeal shower syringe, or instrument for washing the upper part of the 55 throat. *bb* is the barrel of the syringe, and *cc* the piston rod. To this is attached a small, straight tube *dd* with a globe *e* at the end, with fine holes pierced in it from the outer end to the center. 60

Fig. 2 is a central longitudinal section of the laryngeal shower syringe, or instrument for washing the walls of the larynx. It has a syringe *bb—cc* to which is attached a small bent tube *ff* with a globe *e* at the end 65 pierced with a strip or belt of fine holes. A single jet from the syringe will throw a very fine stream through each of the holes in the globe and wash all sides of the walls of the larynx. 70

Fig. 3 is a central longitudinal section of the nasal shower syringe or instrument for washing the back passages to the nose. It is constructed, like the others, of a syringe *bb—cc* and has a bent tube *gg* attached to it 75 with a globe *e* at the end pierced with fine holes at the upper end.

Having thus described my shower syringes, I shall state my claim as follows.

What I claim as my invention and desire 80 to have secured to me by Letters Patent, as a new and useful surgical instrument for the treatment of diseases of the air passages of the throat and nose, is—

The above syringe constructed of the 85 form and of the materials described, for the objects set forth.

IRA WARREN.

Witnesses:

EZRA LINCOLN,  
JOSEPH GAVETT.