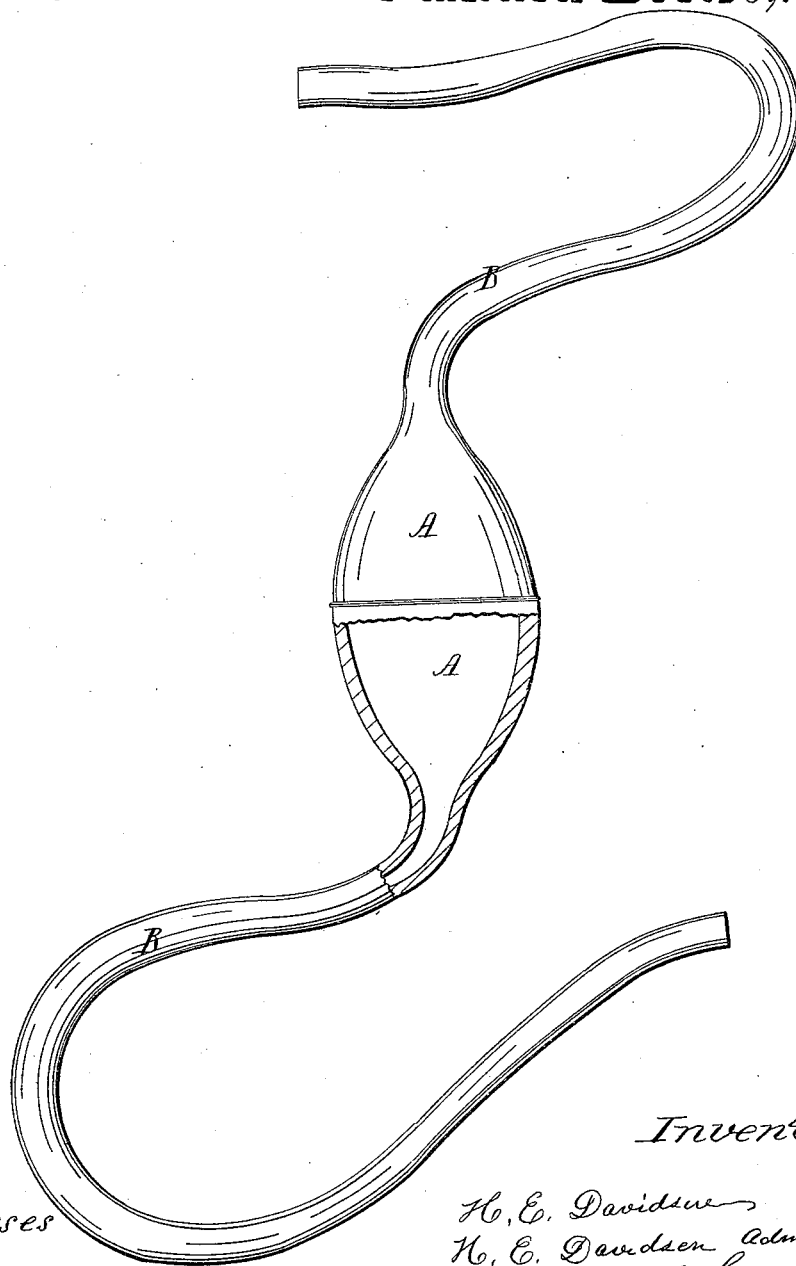


*H.E. & C.H. Davidson,*

*Syringe.*

*N<sup>o</sup> 51,778.*

*Patented Dec. 26, 1865.*



*Witnesses*

*H. Gould  
W. B. Gleason*

*Inventor:*

*H. E. Davidson  
H. E. Davidson Admunkata  
By W. B. Gossy Atty.*

# UNITED STATES PATENT OFFICE.

HERMAN E. DAVIDSON, OF GLOUCESTER, FOR HIMSELF AND AS ADMINISTRATOR OF THE ESTATE OF C. H. DAVIDSON, (DECEASED,) LATE OF CHARLESTOWN, MASSACHUSETTS.

## IMPROVEMENT IN ELASTIC SYRINGES.

Specification forming part of Letters Patent No. 51,778, dated December 26, 1865.

### *To all whom it may concern:*

Be it known that H. E. DAVIDSON, of Gloucester, in the county of Essex and State of Massachusetts, and C. H. DAVIDSON, late of Charlestown, in the county of Middlesex and State aforesaid, (deceased,) did invent an Improved Elastic Syringe-Bulb, and I, H. E. DAVIDSON, as aforesaid, for myself and as administrator of the estate of said C. H. DAVIDSON, do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of said invention sufficient to enable those skilled in the art to practice it.

In the manufacture of elastic bulb-syringes having flexible induction and eduction pipes and a suitable valvular arrangement, the practice heretofore has been to attach the flexible induction and eduction pipes to the bulb by means of metallic or rigid connections or couplings. Much difficulty is experienced in rendering the joints between the rubber and the couplings perfectly tight or impervious to the passage of the injection fluid when pressure is applied to the bulb after filling it, and various methods of constructing and packing these joints have been devised and used, none of which, however, are free from objection.

It is the object of this invention to remedy this objectionable construction, and to effect

such result the flexible pipes are molded with the bulb, forming an elastic bulb and flexible induction and eduction pipes all in one piece, and it is this improved construction which constitutes the invention, or, in other words, an elastic syringe-bulb, having flexible pipes integral therewith, to the outer ends of which the metal or rigid valve-boxes and pipes are to be applied.

The drawing represents a bulb having this construction, A denoting the elastic bulb, and B B the flexible pipes, made in one piece with said bulb, being formed therewith in the process of vulcanizing and molding the bulb.

It will be obvious, with this improvement, that the syringe can be made a much more efficient and reliable instrument than when the flexible pipes B B are made as separate pieces from the elastic bulb and attached thereto by metal or rigid connections.

What is claimed is—

The improved elastic syringe-bulb having flexible pipes made in one piece therewith.

In witness whereof I have hereunto set my hand this 23d day of August, A. D. 1865.

HERMAN E. DAVIDSON.

HERMAN E. DAVIDSON,

*Administrator of the estate of C. H. Davidson.*

Witnesses:

D. PATTEN,

G. F. BOWKER.