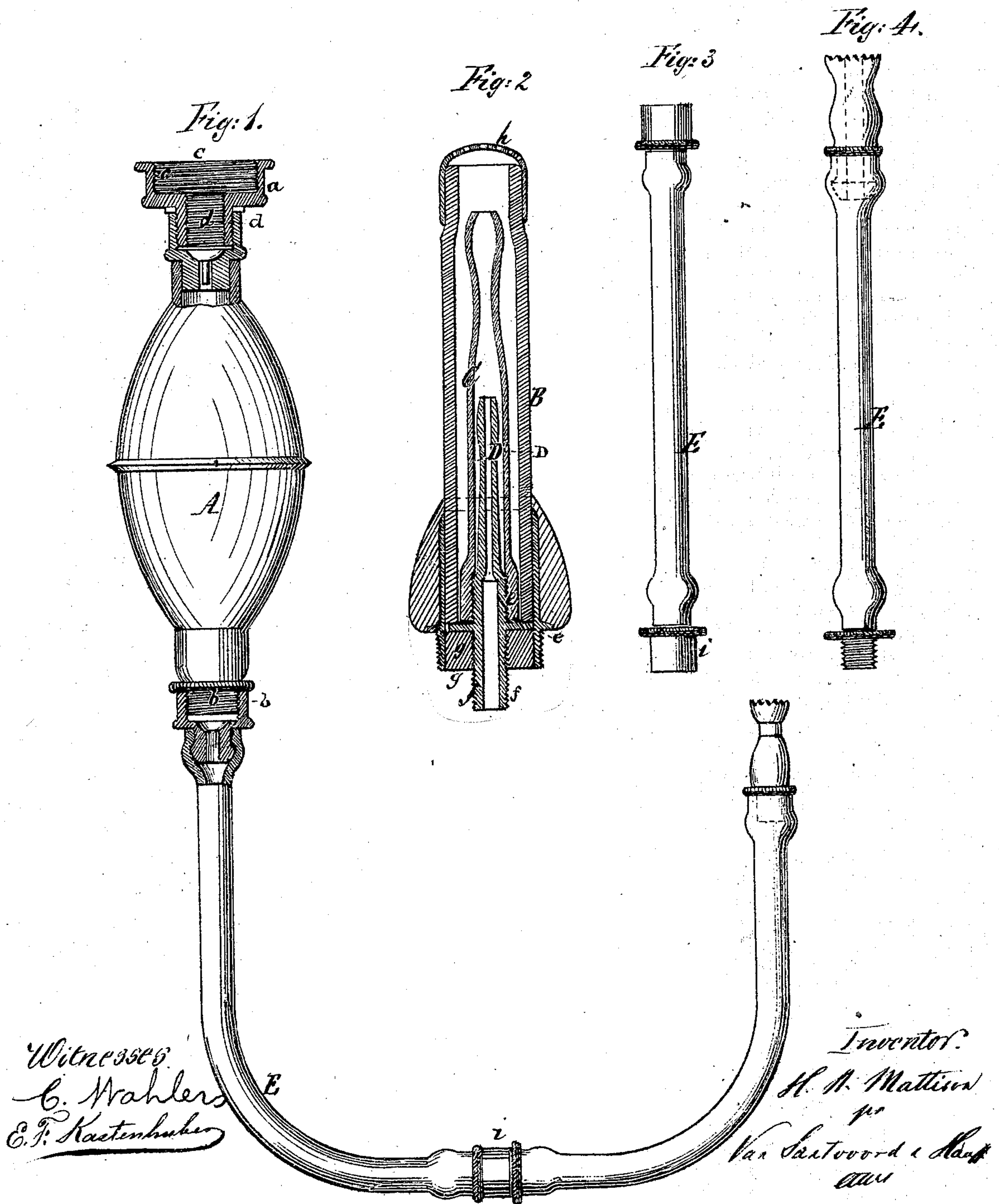


*H.N. Mattison's Improved Syringes.*

No. 120,525.

Patented Oct. 31, 1871.





# UNITED STATES PATENT OFFICE.

HORATIO N. MATTISON, OF NEW YORK, N. Y.

## IMPROVEMENT IN SYRINGES.

Specification forming part of Letters Patent No. 120,525, dated October 31, 1871.

*To all whom it may concern:*

Be it known that I, HORATIO N. MATTISON, of the city, county, and State of New York, have invented a new and useful Improvement in Syringes; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a sectional side view of my syringe without the nozzle. Fig. 2 is a longitudinal central section of my compound nozzle. Figs. 3 and 4 are detached views of the sections of my suction-pipe.

Similar letters indicate corresponding parts.

This invention relates to a syringe the bulb of which is provided with a socket capable of receiving nozzles of different size and shape, said nozzles being so formed that they can be inserted into each other for greater convenience in packing the same.

One of my nozzles is made soft and flexible, so as to enable the patient to use the same with greater convenience than a rigid nozzle. The suction-pipe of my syringe is made in sections, which are united by couplings, so that the length thereof can be increased or diminished, and that the pipe can be taken apart to be packed in the smallest possible compass.

In the drawing, A designates the bulb of a syringe, which is provided at one end with a socket, *a*, to receive the nozzle, and at the other end with a nipple, *b*, to receive the suction-pipe. The socket *a* is provided with two internal screw-threads, *c d*, one of which is intended to receive the large cylindrical nozzle B and the other either of the small nozzles C or D; and the nozzle C is bored out so that the nozzle D can be inserted therein, a screw-thread, *e*, being provided in the end of

said nozzle C to receive a corresponding thread on the stem of the nozzle D. On the screw-shank *f* of the nozzle D is secured a cock or elastic packing piece, *g*, which fits into the bore of the large nozzle B, and the nozzles C and D can be pushed into the large nozzle for greater convenience in packing. The cock *g* forms a pad, which bears against the shoulder of the screw-socket *a* when the small nozzles are secured to the bulb A. The body of the nozzle B is made of India rubber or other soft and flexible material, and it is provided with a metallic cap or mouth-piece, *h*. By these means a nozzle is obtained which can be used without danger of injuring any part of the body; and, furthermore, by combining two or more nozzles with the same bulb a syringe is produced for universal use. The suction-pipe E of my syringe is made of several sections, which are united by couplings *i*, so that the length of the suction-pipe can be increased or diminished to suit the patient; and, furthermore, my suction-pipe can be taken apart in convenient lengths for packing.

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

1. The arrangement of two screw-threads of different size in the socket *a* of the bulb A to receive nozzles of different size and shape, substantially as set forth.

2. The arrangement of a screw-thread, *e*, in the end of the nozzle C to receive a corresponding thread on the stem of the nozzle D, substantially as described.

3. The compound nozzle B C D, constructed as shown and described.

HORATIO N. MATTISON.

Witnesses:

W. HAUFF,  
C. WAHLERS.

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