

(No Model.)

J. A. GRANT.
Elastic Bulb Syringe for Washing Out the Stomach

No. 243,121.

Patented June 21, 1881.

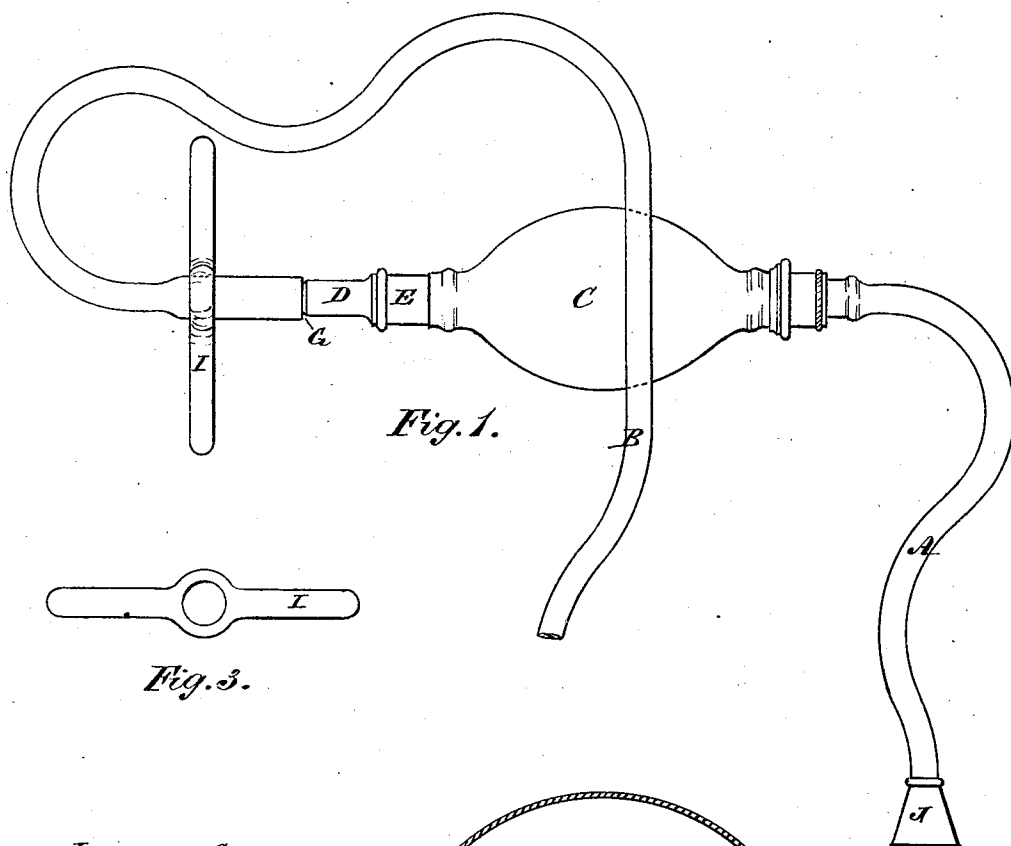


Fig. 1.



Fig. 3.

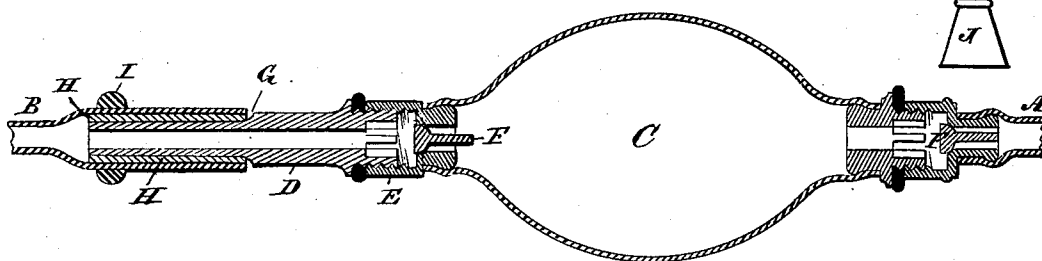


Fig. 2.

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UNITED STATES PATENT OFFICE.

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ELASTIC-BULB SYRINGE FOR WASHING OUT THE STOMACH.

SPECIFICATION forming part of Letters Patent No. 243,121, dated June 21, 1881.

Application filed April 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. GRANT, of the city of Ottawa, in the county of Carleton, in the Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Elastic-Bulb Syringes for Washing Out the Stomach; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of this invention is to improve elastic-bulb syringes, whereby they can be used for exhausting the contents of the human stomach and washing it out with great facility; and my invention consists in connecting the flexible eduction-tube to the bulb, so that it can be instantaneously detached to allow the contents of the stomach to be ejected through the tube by the action of the stomach when the tube is passed down the throat of the patient, thus dispensing with artificial suction as performed by the ordinary stomach-pump. To this end the flexible tube is provided with a sleeve-joint by means of a ferrule inserted into the tube, and a hollow stem connecting with the bulb and fitting into the ferrule to form a tight joint, so that by a direct pull in the direction of the tube the parts can be instantaneously separated when the vomiting action of the stomach begins. The ferrule portion forms a rigid base which the patient bites, the ferrule preventing the tube being closed by pressure of the teeth; also, in the provision to the eduction-tube of the syringe, of a mouth gag or rest sleeving on the ferruled portion of the tube to place between the jaws of the patient when the tube is in the throat to hold the syringe fixedly.

Figure 1 is an exterior view of my improved syringe. Fig. 2 is a longitudinal section of the sleeve-joint connection of bulb and tube. Fig. 3 is a plan of the gag-piece.

Heretofore the contents of the stomach have been drawn by the suction of a pump, and the washing of the stomach performed by alternate swallowing and pumping.

I am not aware that the means herein specified have ever been practiced—namely, the introduction through the throat into the stomach of the tube of an elastic-bulb syringe, then injecting fluid through the same in the ordinary manner of syringing, and disconnecting the

tube from the bulb to allow the contents of the stomach to be ejected by its action through the tube.

Syringes at present constructed are ill-adapted for such operation, as the disconnection of the tube from the bulb cannot be effected with sufficient rapidity. I therefore provide the tube to be inserted down the throat with a hollow stem and ferrule-connection, to enable separation of the parts to be instantaneously effected at the proper time by pulling in the direction of the tube.

A is the suction or induction tube, and B the eduction-tube, both connected to an elastic-bulb, C, by valved screw-couplings, constituting the ordinary elastic-bulb syringe.

D is a tubular stem screwing into collar E on end of bulb C, and which stem is provided with an ordinary syringe-valve, F. The stem D is reduced from the outer extremity to form a shoulder, G, and in the tube B is fixed a ferrule, H, into which the reduced end of the stem accurately fits, the shoulder closing the end of the ferrule to make a tight joint, and admits of the parts being separated by a slight pull in the direction of their length instantaneously with the reaction of the stomach, to allow its contents to escape through the tube B when in the throat of the patient. After the stomach has thrown off its contents the joint is slipped together again, and fluid injected into the stomach by placing the weighted end J of tube A in a suitable basin containing the fluid to be injected for the purpose of washing out the stomach, the disconnection of the joint being required at each reaction of the stomach to throw off its contents.

The operations of exhausting the stomach and washing it out can by my improvement on elastic-bulb syringes be performed without much professional skill, and the cheapness and usefulness of such syringe will cause it to be in possession of every medical practitioner, public institution, and private household, as its use as an ordinary injection-syringe is not impaired by my improvement for adaptation as a stomach-syringe.

To further improve the use of the syringe for exhausting the stomach, I sleeve on the ferruled portion of tube B a gag-bar, I, to place across the mouth, between the jaws of the pa-

tient, whereby the syringe will be held by the patient biting on the ferruled portion of the tube. The ferrule, therefore, forms an important portion of my invention, for without it
5 the tube would be closed by the bite of the patient.

I claim as my invention—

1. An elastic-bulb syringe provided with a disconnecting sleeve-joint connecting the dis-
10 charge-tube with the bulb, consisting of tubular stem D, secured to the bulb, and ferrule H,

inserted into the tube, and both slipping together, as and for the purpose set forth.

2. As an improvement in elastic-bulb syringes, the combination, with the tube B, of the
15 gag I and ferrule H, as and for the purpose set forth.

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Witnesses:

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