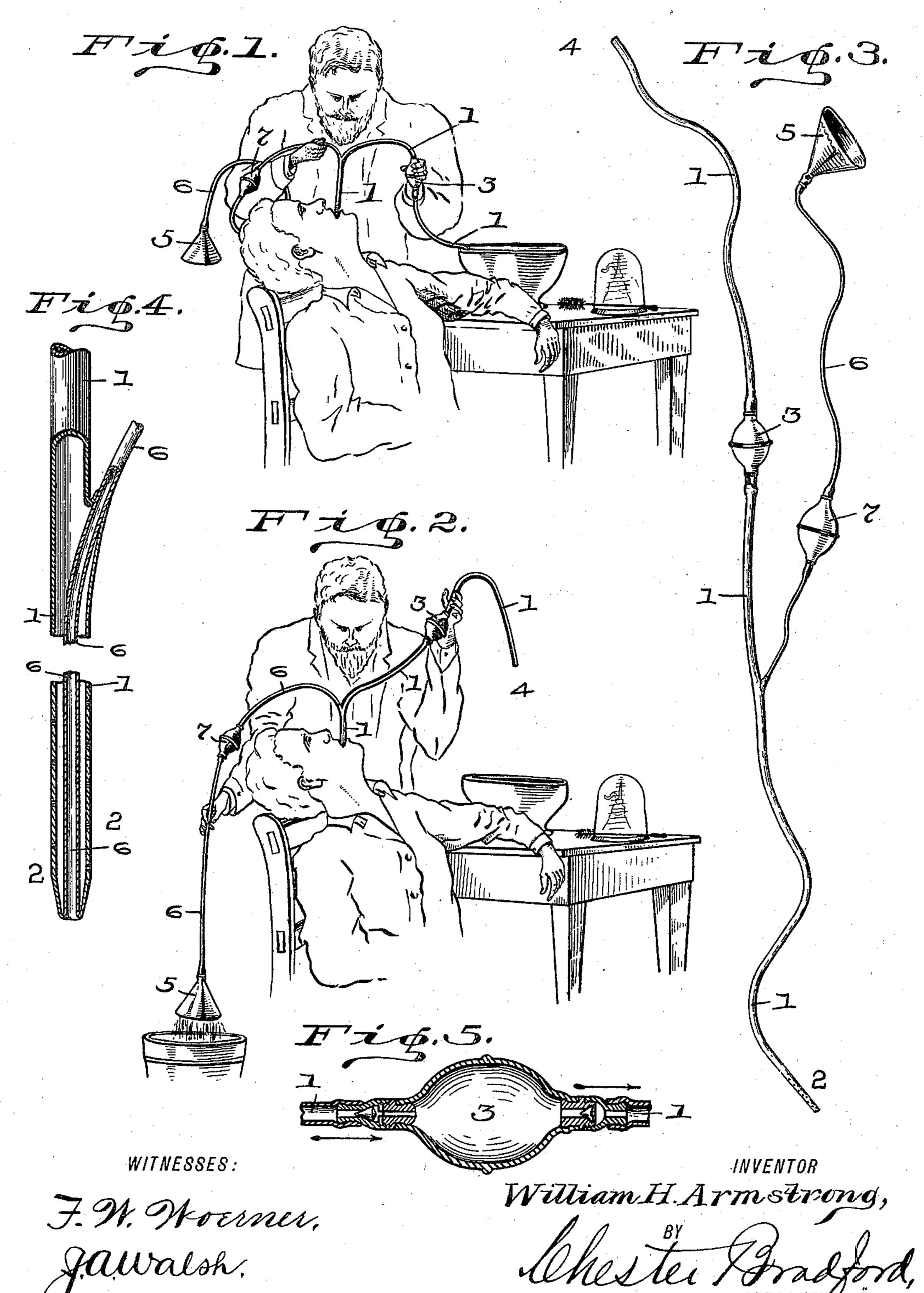
(No Model.)

W. H. ARMSTRONG. STOMACH DOUGHE.

No. 598,407.

Patented Feb. 1, 1898.



United States Patent Office.

WILLIAM H. ARMSTRONG, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE WM. H. ARMSTRONG & COMPANY, OF SAME PLACE.

STOMACH-DOUCHE.

SPECIFICATION forming part of Letters Patent No. 598,407, dated February 1, 1898.

Application filed August 23, 1897. Serial No. 649,128. (No model.)

To all whom it may concern:

Beit known that I, WILLIAM H. ARMSTRONG, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Stomach Douches and Dilators, of which the following is a specification.

The object of my said invention is to furnish an apparatus whereby the stomach or abdominal cavities of the human body may be efficiently washed out and liquid solutions applied thereto.

It consists in a peculiarly arranged and connected system of flexible tubes and bulbs, as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof and on which 20 similar figures of reference indicate similar parts, Figure 1 is a perspective view illustrating the use of my apparatus when employed as a dilator for the stomach; Fig. 2, a similar view showing how the contents of the 25 stomach can be discharged by its use; Fig. 3, a view of the apparatus separately; Fig. 4, a detail sectional view illustrating some of the features of construction of said apparatus, and Fig. 5 a sectional view of one of the bulbs.

and Fig. 5 a sectional view of one of the bulbs. The apparatus consists, essentially, of a main tube 1, at the discharge end 2 whereof are preferably numerous fine radial perforations. At a suitable point in said tube 1 is a bulb 3, by which a pumping operation may be carried on, said bulb being of a usual and well-known construction for this purpose. The receiving end 4 is shown as a plain tube end; but a funnel 5 may be transferred from the tube 6 thereto, if desired. The tube 6 is 40 united at its lower end to the extreme lower end of the tube 1 and extends within said tube for a certain distance and then emerges therefrom, being tightly secured to the opening in the wall of the tube 1, through which 45 itemerges, so that an air and water tight joint shall be formed. At a suitable point in said tube 6 is also a bulb 7 of a usual and wellknown construction, by which a pumping operation may be conducted when desired, the valves in which, however, are set to operate

in the reverse direction from those in the bulb

3. Both of said tubes are flexible and of suitable soft material, as before stated, in order to be adapted for this peculiar service.

Various operations can be conducted by 55 the use of my apparatus. It can be used as an ordinary stomach-douche, in which case the liquid is first poured into the stomach through either of the tubes, and may be discharged by siphoning through the tube 6, 60 which in such case occupies the position shown in Fig. 2. When used in this way, the funnel is attached to whichever tube the fluid is introduced through. It may be used as a dilator by introducing the end 2 into the stom- 65 ach-cavity, closing the tube 6 tightly by pinching or otherwise, as illustrated in Fig. 1, and operating the pump-bulb 3, which, as will be readily understood, forces either air or a liquid into the stomach-cavity, dilating 70 it until its folds are entirely expanded. The solution may then be applied through the same tube under a controlled pressure and will discharge through the perforations in the end 2 and against every part of the mu- 75 cous surface of said cavity. The fluid will escape through the tube 6 either by positioning it as a siphon or under the pressure which is applied, or it may be pumped out by operating the bulb 7.

By the use of this apparatus the operator is enabled to dilate the stomach with air or liquid, apply his solution to its entire inner surface in the form of spray or otherwise, remove the solution continuously as fast as 85 applied, and continue the operation so long as may be necessary to effect the cleansing, all without the necessity of at any time removing the tube from the stomach and without the aid of any cumbersome or expensive 90 attachments. He may also by the use of said apparatus precede the other operations by emptying the stomach of its ordinary contents. Said apparatus is thus not only highly efficient and adapted to a considerable variety 95 of uses, but, as will be readily seen, is light and portable and is comparatively inexpensive.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a stomach douche and dilator, the

combination, of a main tube formed with a discharge end having perforations and adapted to be inserted into the cavity to be treated, a bulb-pump therein with its valves arranged to act toward said discharge end, another tube extending for a portion of its length within said main tube with its lower end

tube extending for a portion of its length within said main tube with its lower end joined to said discharge end and a tight joint between said two tubes where the one passes to through the side of the other, and another

bulb-pump in said second tube with its valves arranged to act in the opposite direction from those of the bulb in said main tube, substantially as set forth.

2. A stomach douche and dilator consisting of a main tube of soft flexible material adapted to be inserted in the stomach, the

discharge end being formed with perforations, means for forcing liquid through said tube, a second tube extending for a portion of its 20 length within said main tube and also formed flexible, its lower end being open and connected with the lower end of said main tube, and means connected therewith for drawing out the liquid forced in the opposite direction 25 through said main tube, all substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 19th day of August, A. D. 1897.

WILLIAM H. ARMSTRONG. [L. s.]

Witnesses:

CHESTER BRADFORD, JAMES A. WALSH.