No. 883,583. PATENTED MAR. 31, 1908.

J. F. STALLSMITH.

STOMACH PUMP.

APPLICATION FILED MAR. 5, 1906.

Fig. 1.

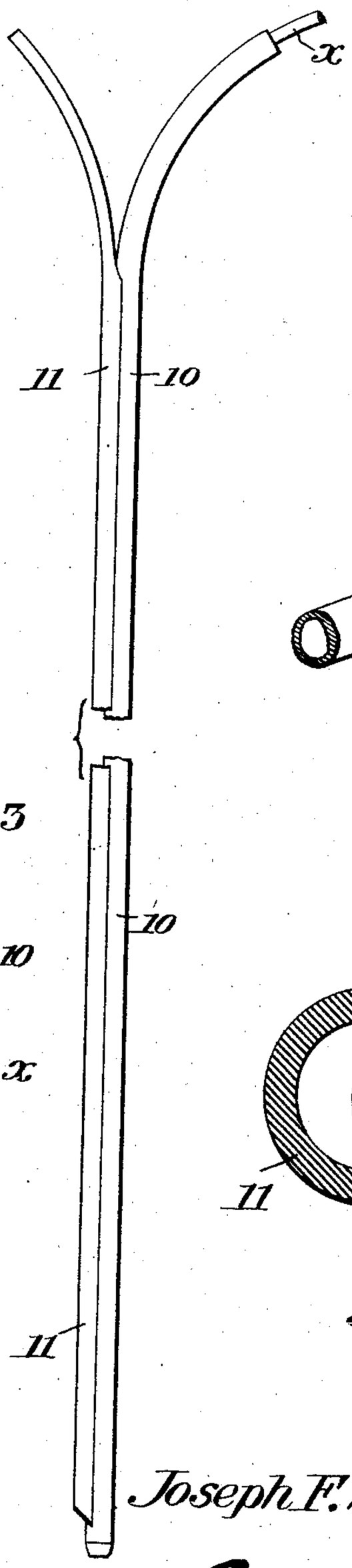


Fig. 2.

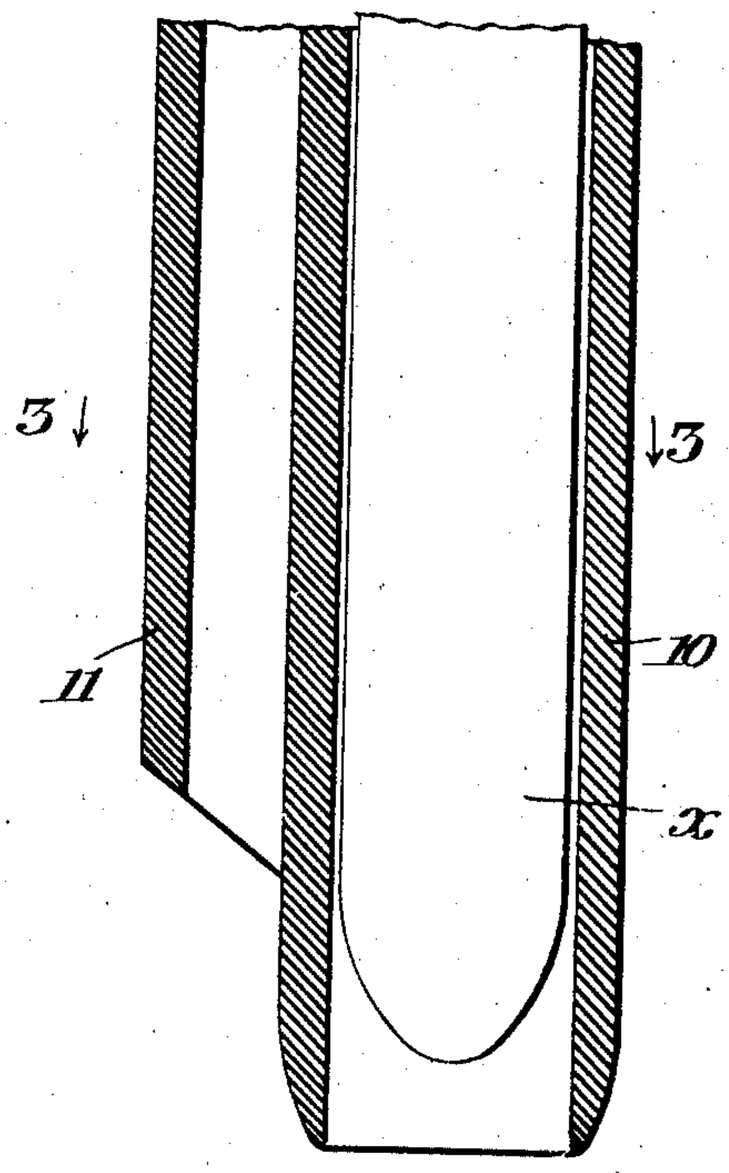
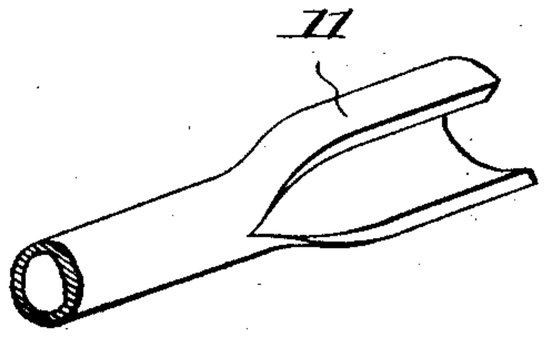


Fig. 4.



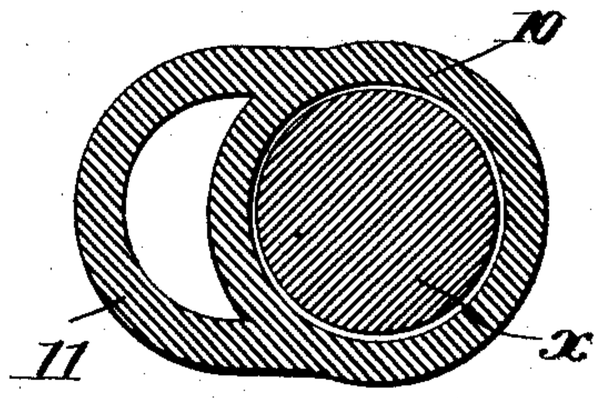


Fig. 3.

WITNESSES:

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JOSEPH F. STALLSMITH, OF TOPEKA, KANSAS.

STOMACH-PUMP.

No. 883,583. Specification of Letters Patent. Patented March 31, 1908.

Application filed March 5, 1906. Serial No. 304,292.

To all whom it may concern:

Be it known that I, JOSEPH F. STALLSMITH, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Stomach-Pump, of which the following is a specification.

This invention relates to stomach pumps and devices of similar character employed for flushing or the removal of material from the stomach, and has for its principal object to provide an apparatus in which both induction and eduction tubes may be arranged side by side to permit the ingress of water or other liquid during the pumping operation, without material increase in the diameter over the ordinary single tube usually employed, so that it may be readily introduced through the esophagus.

A further object of the invention is to provide an improved construction in which very thin tubes may be employed, and to provide for the stiffening of both the inflow and outflow tubes by the insertion of a flexible rod in one of them in order to facilitate the forcing of the tube into the stomach, the rod being afterwards withdrawn in order that the tubes may be employed for the passage of liquid. This construction has a further advantage, in that it permits the employment of very thin flexible rubber which will not irritate the throat or mucous membrane.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is a general perspective view of a stomach pump constructed in accordance with the invention, the lifting and forcing devices being omitted. Fig. 2 is a detail sectional view of a portion of the same drawn to an enlarged scale, and illustrating principally the construction of the entrance end of the tube and the employment of the stiffening rod. Fig. 3 is a sectional plan view on the line 3—3 of Fig. 2, drawn to an enlarged scale. Fig. 4 is a detail perspective view of the upper portion of the inlet tube detached.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The eduction tube 10 is of suitable diameter, and is formed of rubber much thinner and more flexible than that ordinarily employed in similar devices, and at one side of which is an induction tube 11, the latter serving to permit the down flow of water or other liquid for flushing or similar operations, while the eduction tube operates in the usual manner to permit the withdrawal of the liquid and other material. The passage through the eduction tube 10 is preferably circular in cross section, while the passage through the induction tube 11 is crescentic in like section, there being a single partition between the two passages, and such partition may be made extremely thin, inasmuch as it is not subjected to external pressure by contact with the throat or esophagus.

At the entrance end of the eduction tube 10 the outer wall of the tube is tapered in order to facilitate its introduction, and the induction tube 11 does not extend down close to the bottom or entrance end of the tube 10, but, on the contrary, is so arranged that its outermost wall is inclined, and is tapered in order that it may be readily forced into place without irritation.

The two tubes are practically integral for nearly their entire length, and they may be molded from a single mass of rubber, or the tube 11 may be cemented or otherwise secured to the tube 10. At the outer end the tubes are separated in order that the tube 11 may be connected to a liquid supply, while the tube 10 is connected to the usual pumping mechanism.

It will be seen that while two separate and independent passages are secured, one for the inflow, and the other for the outflow of the liquid, the diameter or cross sectional area of the tubes is not materially increased over that of the ordinary suction tube, and, owing to the central partition, the device may be made of rubber much thinner and more pliable than that ordinarily employed, without danger of collapsing from external pressure.

In order to properly introduce the tube, a rod x is first placed in the tube 10, and then

the tube is introduced in the usual manner and employed for the usual flushing or other operations.

I claim:—

A stomach pump approximately elliptical as a whole in cross section and comprising an eduction tube circular in cross section and internally unobstructed from end to end, an induction tube crescentic in like section and secured to the eduction tube and also internally unobstructed from end to end, the passages through the tubes from end to end including the terminals being of like diameter throughout.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOSEPH F. STALLSMITH.

Witnesses:
DAVID O. KNISELY,
ROY BEST.