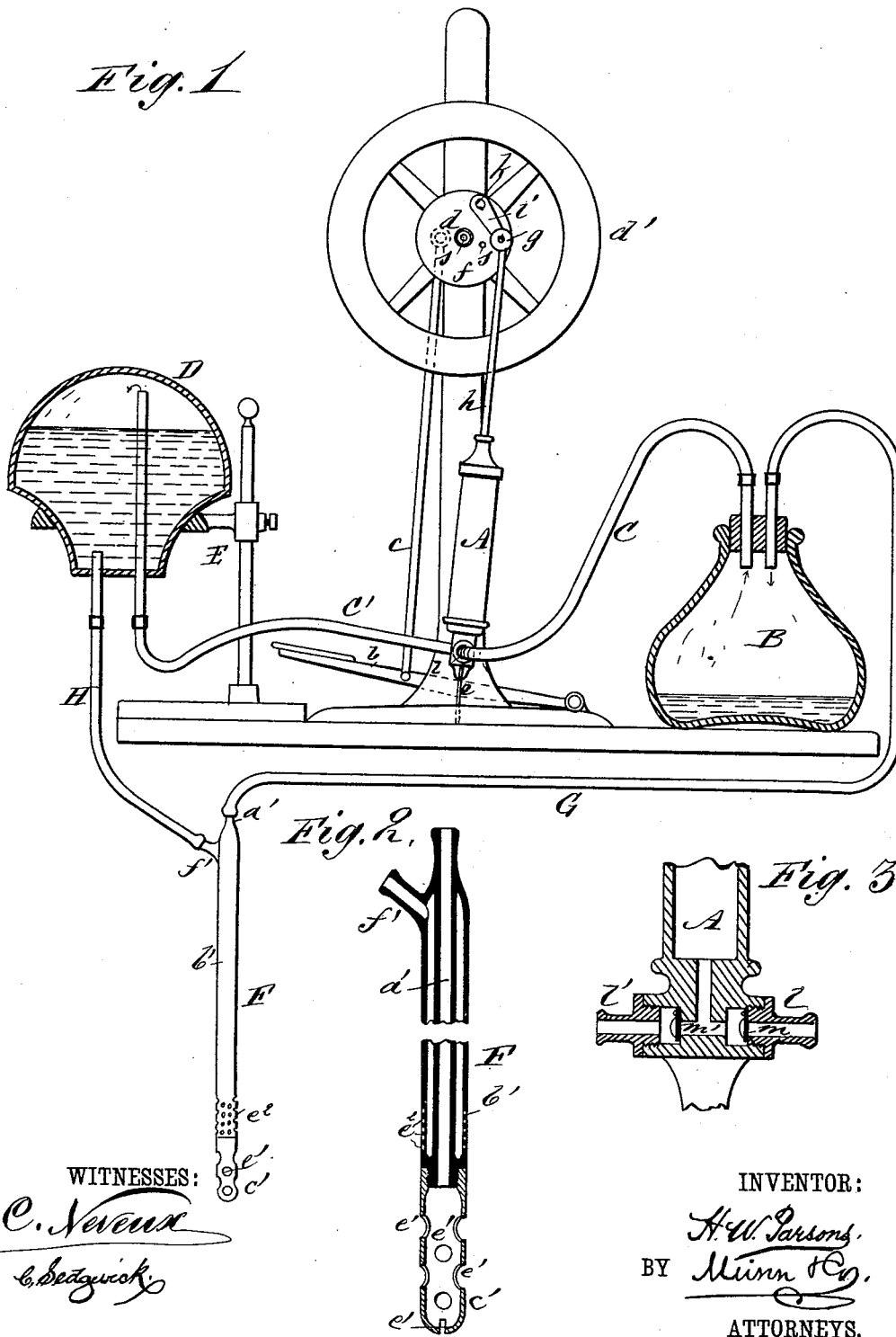


(No Model.)

H. W. PARSONS.  
STOMACH PUMP.

No. 386,603.

Patented July 24, 1888.



# UNITED STATES PATENT OFFICE.

HORACE WARREN PARSONS, OF WAMEGO, KANSAS.

## STOMACH-PUMP.

SPECIFICATION forming part of Letters Patent No. 386,603, dated July 24, 1886.

Application filed October 11, 1887. Serial No. 251,977. (No model.)

*To all whom it may concern:*

Be it known that I, HORACE WARREN PARSONS, of Wamego, in the county of Pottawatomie and State of Kansas, have invented a new and useful Improvement in Stomach-Pumps, of which the following is a full, clear, and exact description.

This invention, which is applicable to various surgical and other operations, consists in a novel apparatus for the purpose of washing out and removing the contents of the stomach, bladder, or other cavities of the body; and it comprises special constructions and combinations of parts, substantially as hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a partly-sectional elevation of an apparatus embodying my invention. Fig. 2 is a broken longitudinal section, upon a larger scale, of a stomach-tube forming a portion of the apparatus, and serving to throw fluids into the stomach to act as antidotes to poison and to remove the same from the stomach, whereby a cleansing-current is established through the stomach or other interior organ to which said tube may be applied. Fig. 3 is a longitudinal section of the valvular portion of a pump forming a portion of the apparatus.

In the apparatus shown in the drawings, A is a reciprocating plunger-pump, the piston or plunger of which may be operated by a treadle, *b*, through a pitman, *c*, and crank upon a main shaft, *d*; or said pump may be otherwise driven—as, for instance, through a drive-wheel, *d'*. Said pump, which is an oscillating one, is carried by a flat spring, *e*, projecting upward from any suitable base or support, and which, being attached at its upper end to the pump, provides for the vibration or oscillation of the latter, as required. This pump is driven by a crank or face-plate, *f*, the wrist to which the piston-rod *h* is attached being marked *g*. The wrist *g* is applied to an arm or plate, *i*, which is pivoted, as at *k*, on the face-plate, so as to vary the distance of the wrist-pin from the center of the face-plate or its shaft *l*, there being any number of holes *s*, with which the wrist-pin, that may be in the form

of a thumb screw, is made to engage; or the arm *i*, carrying the wrist-pin, may be otherwise adjustably secured upon the face-plate. The apertures *s*—one of which may be in the center of the face-plate *f* and the others at different distances therefrom—serve, accordingly as the wrist-pin is adjusted in relation with them, to vary the length of the stroke of the pump, or, when the wrist-pin is in line with the central one of the apertures *s*, to arrest the action of the pump altogether without stopping the motion of the driver. This adjustable arm or plate *i* and face-plate *f* constitute what may be termed an “adjustable crank.”

The pump A, which may be otherwise constructed and operated, if desired, has opposite side nozzles, *l l'*, fitted with valves *m m'*, and the one of which, *l*, is an exhaust-nozzle, while the other, *l'*, is a discharge-nozzle.

B is a stoppered receiver, with the upper space of which the exhaust-nozzle *l* is connected by a tube, C, that may be more or less flexible and be in any number of pieces. D is a close flask or vessel, with the upper space of which the other or discharge nozzle, *l'*, is connected by a tube, C', as shown, or in any other suitable manner—as, for instance, as the receiver B is connected with the nozzle *l*—the tube C' also being more or less flexible and being made in any number of pieces.

When the pump is at work, it operates to exhaust the air from the receiver B and to discharge it into the flask or vessel D.

The receiver B, which serves to receive the contents of the stomach or other organs under treatment, may be stationary and only requires to be removed when it is necessary to empty it; but the flask or vessel D, which contains the fluid used in washing out the stomach or other cavity or organ, should be readily removable and may rest in a support, E. When constructed as shown, the flask D may be inverted for the purpose of filling it.

F is the stomach-tube, or rather double-current tube, applicable not only to washing out the stomach, but other cavities or organs of the body. This tube is a compound one, the same being composed of an inner tube, *a'*, and an outer tube, *b'*, arranged to leave a space in between them. At the one end of these tubes is a perforated nozzle, *c'*, which virtually

forms an extension of the inner tube,  $a'$ , and which is perforated, as at  $e'$ , to receive the contents of the stomach or organ being operated on through it and out through the tube  $a'$ , and from thence by a tube, G, to pass said contents into the receiver B, the tube G, which connects with the outlet end of the tube  $a'$ , passing at its other end through the stopper in the receiver B and opening into the upper space of said vessel. The inner tube,  $a'$ , is a rigid one, so that it will not collapse when exposed to the vacuum in the receiver B, with which it connects; but the other tube,  $b'$ , should be made soft and yielding to permit of a free passage of the washing-fluid through it and out in the form of a spray or small streams, through perforations  $e''$  near the inner end of said tube, into the stomach or organ under treatment. This outer tube,  $b'$ , is closed at its ends, but is provided at or near its receiving end with a branch or nozzle,  $f'$ , with which a tube, H, connects. This tube H passes into and through the bottom of the vessel D, to establish communication between the washing-fluid in the lower portion of said vessel and the tube  $b'$ .

The operation is as follows: Supposing the flask or vessel D to be charged with any suitable or washing fluid and the double-current tube F to be applied to washing out the stomach, then when the pump A is set in motion it will exhaust the air from the receiver B and force said air into the upper portion of the vessel D.

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

1. In apparatus for washing out the stomach and other cavities or organs of the body, the combination of an air exhausting and forcing pump, a close receiver adapted to receive the washed-out contents of the cavity or organ and connected with the suction-inlet of the pump, a separate close receptacle or vessel

adapted to contain the fluid used in washing out the said cavity or organ and connected with the forcing-outlet of the air-pump, ducts or tubes connected, respectively, the one with the upper portion of the close receiver and the other with the lower portion of the vessel containing the washing-out fluid and air under pressure, and a stomach or other like tube common to both of said last named tubes, and adapted to both receive and pass the contents of the organ under treatment and to separately pass or eject the washing-out fluid, essentially as specified.

2. In apparatus for washing out the stomach and other cavities of the body, the double current tube F, composed of an inner tube,  $a'$ , having an attached inlet, perforated extension or nozzle, and an outer tube,  $b'$ , provided with discharge-perforations at or near its one end and an inlet at or near its other end, substantially as herein set forth.

3. The combination, with the double current tube F, constructed for operation substantially as described, of the attached tubes G H and an exhaust vessel or receiver connected with the one tube, G, and a close fluid and air vessel connected with the other tube, H, essentially as specified.

4. The combination, with the pump, of the driving face-plate  $f$ , having adjusting-apertures  $s$  in different positions relatively to the center of said plate, and the arm or plate  $i$ , pivoted to said plate on one side of its center and provided with a wrist or wrist-pin,  $g$ , adapted to engage with any one of said apertures in the face-plate, essentially as described.

5. The pump A, in combination with the spring  $e$ , by which it is carried, and which provides for the vibration or oscillation of the pump, substantially as specified.

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Witnesses:

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