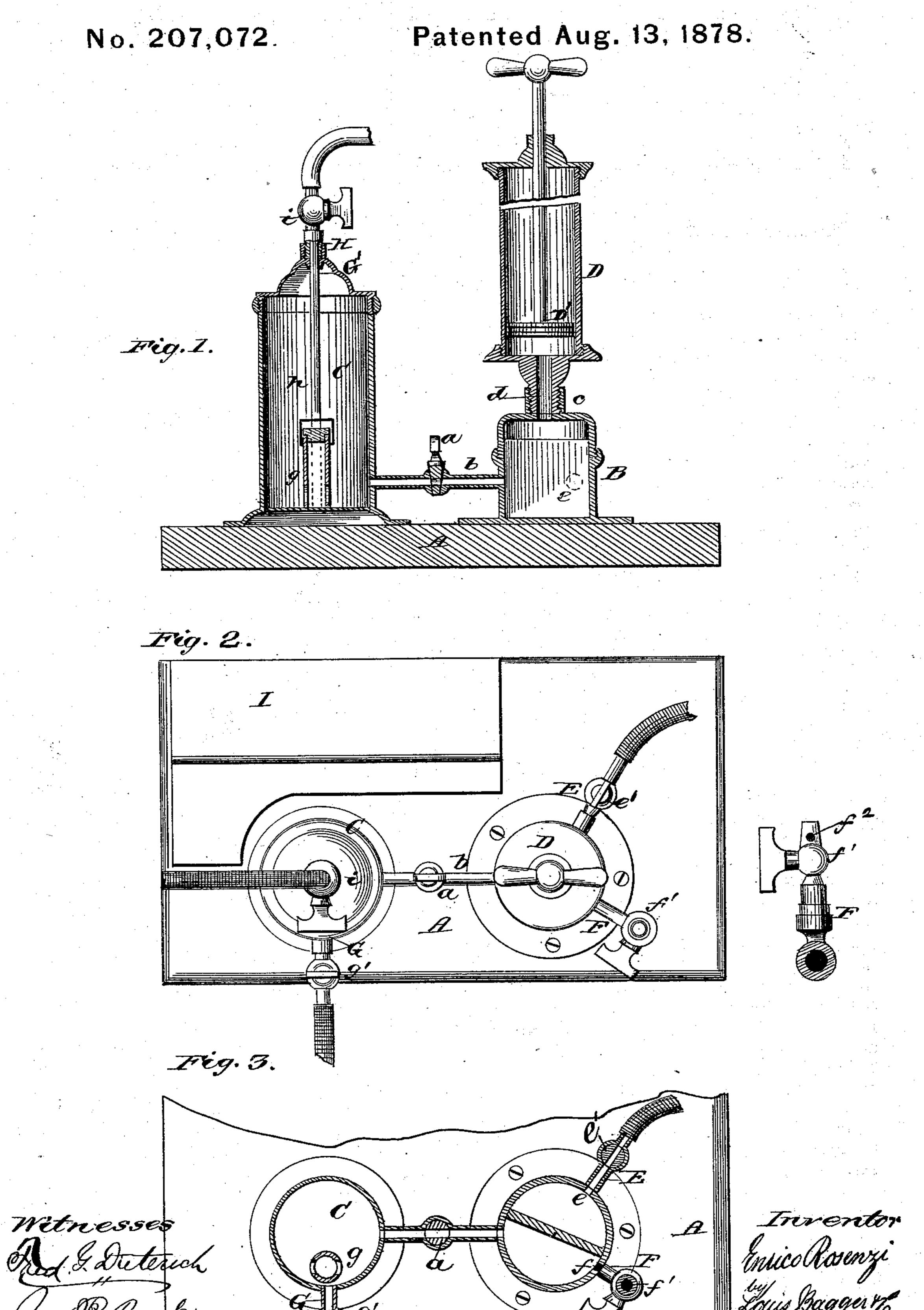
E. ROSENZI.
Stomach and Enema Pumps.



UNITED STATES PATENT OFFICE.

ENRICO ROSENZI, OF CINCINNATI, OHIO.

IMPROVEMENT IN STOMACH AND ENEMA PUMPS.

Specification forming part of Letters Patent No. 207,072, dated August 13, 1878; application filed June 20, 1878.

To all whom it may concern:

Be it known that I, Enrico Rosenzi, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Syringe Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a vertical section. Fig. 2 is a top plan, and Fig. 3 is a horizontal section on the line x x, Fig. 1.

Similar letters of reference indicate corre-

sponding parts in all the figures.

This improvement relates to pumps or syringes used by the medical profession; and it consists in the construction and combination of parts of a combined stomach (or suction) and enema (or injection) pump or syringe, substantially as hereinafter more fully described.

In the drawing, A is the base board or block, upon which is secured the chamber B and receiver or reservoir C, which are united by a short tube, b, having a stop-cock, a. The top of chamber B has a screw-threaded sleeve, c, into which is screwed the screw-threaded nozzle d of the piston-pump D. Besides the perforation to receive tube b the cylindrical wall of the chamber B has two other perforations or openings, e f, connecting with the tubes E F, respectively, the former of which projects from chamber B in a straight line, and has a stop-cock, e', while the latter is bent at a right angle to form an elbow, which is also, at the end of its vertical arm, provided with a stop-cock, f^1 . The bent exhaust-tube F has a small opening, f^2 , on one side, above the stop-cock f', for the purpose hereinafter stated.

The receiver C is a cylindrical vessel secured upon the block or standard A, and having a valve, g, on one side, near the bottom, which connects with a short tube, G, having a stop- cock , g'. Through the center of the removable cover G', the annular screw-threaded flange of which screws into the screw-threaded rim of the receiver C, is inserted a vertical pipe,

I the receiver, as shown. Pipe h communicates with a short vertical tube, H, provided with a stop-cock, i. Upon the base-board A is secured a metal box, I, with a hinged cover, which contains the nozzles, mouth-pieces, and other attachments of the apparatus when not in use, so that these may always be handy and ready for use or exchange, according to the purposes for which it is desired to use the apparatus.

When this apparatus is to be used as a suction-pump to relieve the stomach and intestines from oppressive gases, a piece of flexible tubing of suitable length is secured upon tube E of the chamber B, and a suitably-shaped mouth-piece is secured in the other end of the tube and inserted into the rectum of the patient. The stop-cocks e' and f^1 are then both opened, but a is closed, and the pump D having been screwed into the chamber B, so as to form an air-tight connection therewith, the apparatus is ready for use. By raising the piston-rod and piston D' the gases are drawn through the flexible tube and tube E into the chamber B and pump D, and expelled by depressing the piston through the small opening f^2 in the elbow-tube F.

To use the apparatus as an enema pump or syringe, the stop-cocks $e' f^1$ are both closed and a opened, and a flexible suction-tube is secured upon the mouth-piece G, whose stopcock g' is also opened. Next, another flexible tube is secured upon the vertical mouth-piece H, into the other end of which is inserted a suitably-shaped nozzle, according to whether the apparatus is to be used as a clyster, vaginal syringe, ear or nose syringe, &c. By raising the piston-rod and piston D' the fluid is drawn into the receiver through tube G and valve g, and by reversing this motion and depressing the piston the fluid is injected through pipe h, mouth-piece H, and the flexible tubing and nozzle with which this communicates. By closing stop-cock i' the receiver may be filled with the fluid (either hot or cold) before the operation of injecting it is commenced, or it may, if too hot, be left in this receiver, which may be wrapped in wet cloths or surrounded by pounded ice to cool. By connecting the inlet-pipe or mouth-piece G with a small boiler, h, which reaches down close to the bottom of | such as are used by the medical profession

for injecting steam, medicated or otherwise, steam may be injected through the receiver C instead of fluids.

To use this apparatus as an ordinary clyster for a single charge or injection, the pump D is unscrewed from the chamber B, and a suitably-shaped mouth-piece screwed upon its screwthreaded nozzle, when it is ready for use.

Having thus described my invention, I claim and desire to secure by Letters Patent of the

United States—

1. The combination of the pump-cylinder D, piston D' and its rod, chamber B, having the inlet tube or pipe E, and $\operatorname{cock} e'$ with the pipe b, having a cock, a , cylinder C, provided with an internal tube surmounted by a valve, g,

and the discharging-tube G, having a cock, g', substantially as and for the purpose set forth—i.~e., to provide a clyster or enema apparatus.

2. The cylinder C, having the valve g and central tube or pipe h, and its cover G', provided with a tube and cock, i, in combination with the pipe b and its valve a, chamber B, pipe d, pump-cylinder D, its piston D' and rod, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

presence of two witnesses.

ENRICO ROSENZI.

Witnesses:

WENZEL ADAMS, H. H. KOEHNKEN.