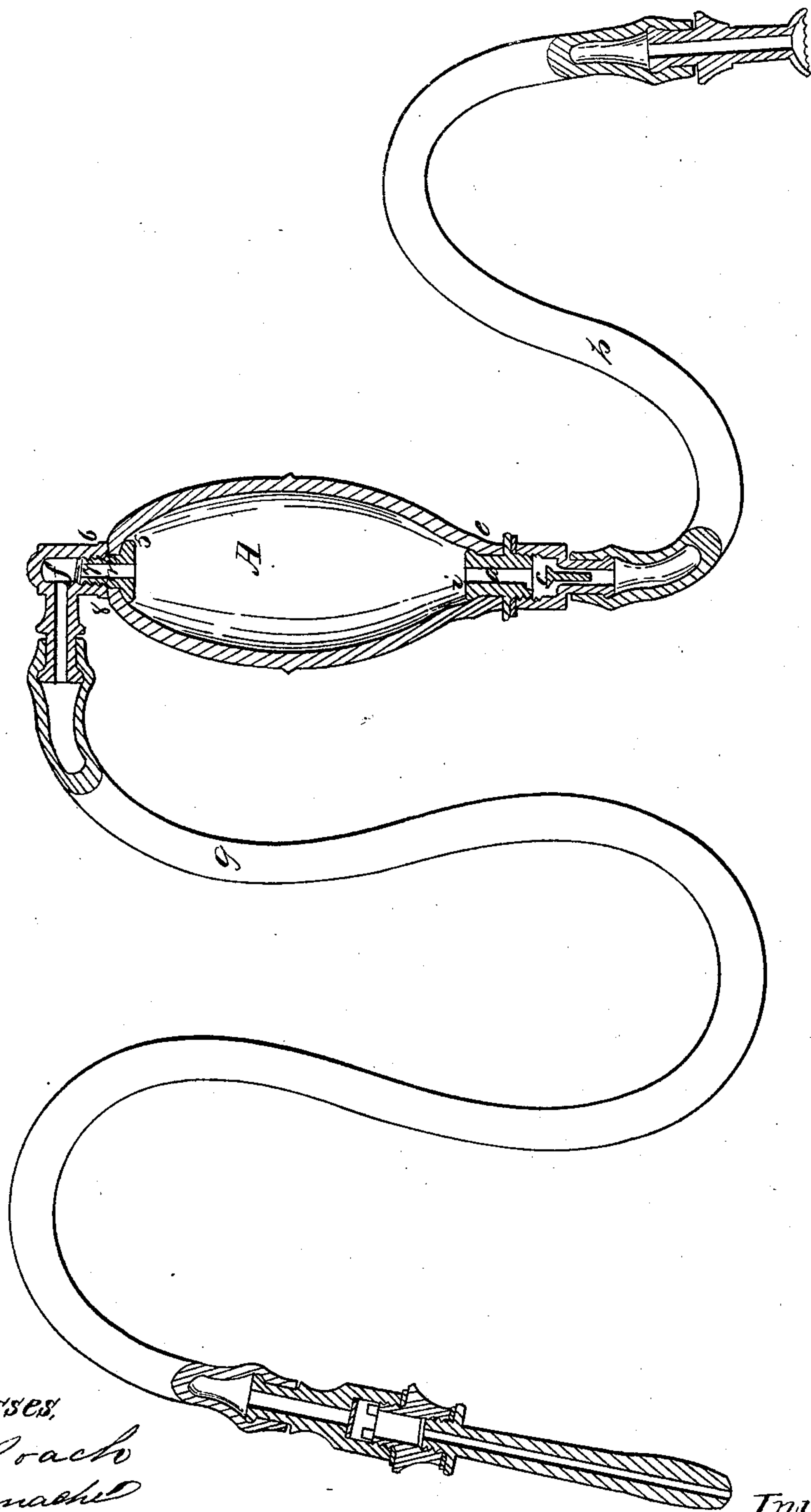


M. Mattson,

Syringe.

N^o 33,747.

Patented Nov. 19, 1861.



*Witnesses,
Thos. R. Roach
J. E. Teschemacher*

*Inventor.
Moris Mattson*

UNITED STATES PATENT OFFICE.

MORRIS MATTSON, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN ENEMA-SYRINGES.

Specification forming part of Letters Patent No. 33,747, dated November 19, 1861.

To all whom it may concern:

Be it known that I, MORRIS MATTSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Enema-Syringes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which is represented a syringe, the india-rubber tubes being shown in full lines and the bag and other parts in section.

In the class of enema-syringes in which an elastic india-rubber bag (A of these drawings) is used to pump the liquid through the syringe short metal pipes of various forms have been used to connect the elastic bag and the india-rubber tubes and to contain one or both of the valves by which the syringe is operated. The usual method of connecting these pipes to the bag is shown at the lower end of the bag A, where the metal pipe *a*, which contains the induction-valve *c* and to which the rubber tube *b* is connected, is secured to the bag by the elasticity of the india-rubber itself, the neck *e* of the bag being forced over a button or knob *i* on the end of the metal pipe *a*. This does not at all times make a sufficiently tight and secure connection. At the upper end of the bag A is shown my improved connection, where the pipe *f*, by which the rubber tube *g* is connected with the bag A, is secured to the bag in such a manner that the joint will be tight, while the pipe *f* and tube *g* may be readily removed from the bag when required. A metal plug *m* has a button or head 5 and a screw-shank 6 of less diameter than the head. A hole 7 passes longitudinally through the plug. The pipe *f* has

a female screw cut in it which fits over the screw 6, and when screwed on, as shown in the drawings, the end of the pipe at 8 presses on the rubber bag and clasps it tightly between the end of the pipe and the head 5 of the plug *m*, making a perfectly tight joint.

When the bag A is formed, as here shown, with a neck *e* and a pipe is to be attached to each end of it, the plug *m* may be introduced through the neck of the bag and be pushed by a stick or proper tool through a hole made in the opposite end of the bag just large enough to allow the shank to pass, but not the head 5 of the plug, and when the attachment is to be made at both ends in a similar manner the bag A should be formed without the neck *e*, both ends of it being rounded off alike, when the button 5 of the plug *m* may be forced through a hole in the end of the bag, leaving the screw-shank 6 projecting, over which the pipe may be screwed, as before stated. This gives a neat and workmanlike finish to the syringe, while it has the desired effect of making a tight and durable connection.

What I claim as my invention, and desire to secure by Letters Patent, as an improvement in elastic-bag enema-syringes, is—

The above-described connection, consisting of the perforated screw-plug *m*, onto which the connecting-pipe screws, confining the bag between the pipe and the head 5 of the plug, in the manner substantially as described.

MORRIS MATTSON.

Witnesses:

THOS. R. ROACH,
P. E. TESCHEMACHER.