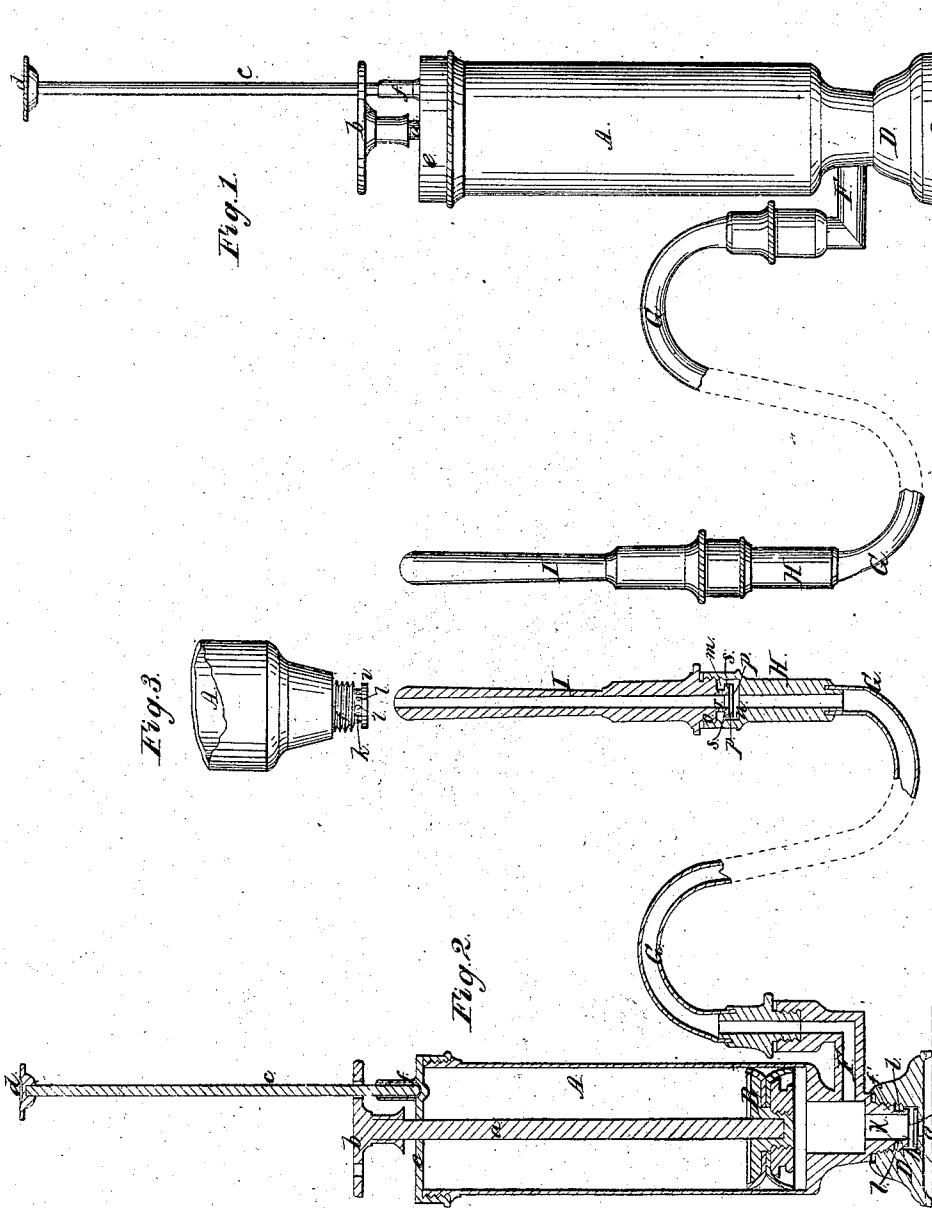


M. Mattson,
Syringe.

No 10,742.

Patented Apr. 4, 1854.



UNITED STATES PATENT OFFICE.

MORRIS MATTSON, OF BOSTON, MASSACHUSETTS.

ENEMA-SYRINGE.

Specification forming part of Letters Patent No. 10,742, dated April 4, 1854; Reissued September 1, 1868, No. 3,106.

To all whom it may concern:

Be it known that I, MORRIS MATTSON, M. D., of Boston, in the county of Suffolk, and State of Massachusetts, have invented an Improved Portable or Pocket Enema-Syringe; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof, whereof—

Figure 1, denotes an elevation, and Fig. 2, a longitudinal and central section of the said instrument.

In the construction of the said syringe, I employ a pump barrel, A, having a piston, B, adapted to it. The rod, *a*, of such piston is provided with a head, *b*, which is perforated to receive or permit the passage through it of a rod, *c*, which terminates at top in a button or head, *d*, and is fixed to the screw cap, *e*, the barrel or made to rest in a socket, *f*, attached thereto. The rod, *c*, or an equivalent therefor may be termed the thumb rest, the object of it being to afford a support for the thumb or finger of a person's hand when the piston rod is being elevated by the application or upward pressure of one or two other fingers of the same hand, the instrument being held down on whatever it may rest by the pressure of such thumb. By means of such thumb rest the syringe can be readily worked with one hand of a person while the other hand is left free to direct the terminal jet pipe of the injection tube up and keep it within the rectum. When not in use, the thumb rest may be removed and packed up in the box or case, which usually accompanies an instrument of this nature.

The lower end of the pump barrel is screwed to a broad base D, by a screw, *f'*. An ingress hole, *g*, is made through the bottom of this base and into a valve chamber *h*, formed within the base and below the screw *f'*. On the bottom of such a chamber and over the hole, *g*, a small circular disk, *h'*, of prepared rubber or other suitable material is placed the diameter of the disk being about a sixteenth of an inch less than that of the chamber.

Above the disk or valve, *h'*, and connected with the lower end of the male screw

on the pump barrel is a circular ring valve stop or seat, *i*, made of an external diameter equal to that of the valve and connected to the screw by a short tube, *k*, whose sides are perforated for the passage of the liquid through them; such perforations being seen at *l*, *l*, in Fig. 2, and in Fig. 3, which is an external view of the stop or seat, *i*, its perforated tube and the lower end of the pump barrel.

In raising the piston, the disk or valve will be drawn up against the seat, *i*, and the liquid will flow upward against the bottom of the valve and around its edges and the seat, *i*, and through the perforations *l*, *l*, and into the barrel. When the piston is depressed, the valve will be forced down on its seat at the bottom of its chamber, and will close the ingress hole and prevent the escape of the liquid through such hole. This construction of the parts enables me to make use of a single disk, as a valve, and without the necessity of a hinge or any connection of it to the surrounding parts.

The exit tube of the barrel, is shown at F, as proceeding from and leading out of the lower parts of it, at a point just above the screw on the lower end of the barrel. To this tube, a flexible tube, G, is screwed or otherwise properly connected, this flexible tube having a socket tube H, fixed on its extreme end. This socket tube is intended to receive the jet pipe, I, which is screwed into it, as seen at *o*, Fig. 2. The socket tube is provided with a valve chamber, *m*, a valve seat, *n*, and a disk valve, *p*, while the screw of the jet pipe has a short perforated tube, *r*, and a circular ring valve seat, *s*, the whole being like those before specified as applied to the pump barrel.

In certain cases, the fluid which is injected into the bowels is often forced back again into the syringe tube by a contraction of the rectum. This is objectionable, because the fluid has been rendered offensive by the addition of fecal or excremental matter. When the terminal tube is withdrawn from the rectum, this fluid flows, or is liable to flow out upon the floor, carpet, or other furniture, unless some means be provided to prevent the same. Thence the importance of placing the ejection valve at that extremity

of the flexible tube which is most distant from the pump barrel, instead of at that end which is directly joined to the barrel.

Having thus described my improved
5 pocket enema syringe what I claim therein is as follows:

1. I claim the combination of the thumb or finger rest (*d*) with the barrel and piston and for the purpose essentially as specified.
- 10 2. I claim the upper ring valve seat (*i*) and the perforated tube, *k*, in combination

with the disk or valve, *h*, and its seat and chamber, the same being made to operate substantially as described.

In testimony whereof, I have hereto set
my signature this twenty third day of July
A. D. 1853. 15

MORRIS MATTSON.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.

[FIRST PRINTED 1913.]