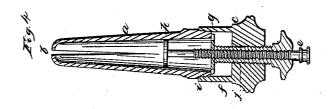
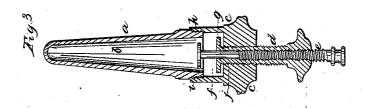
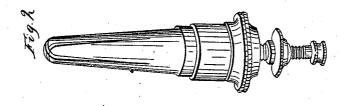
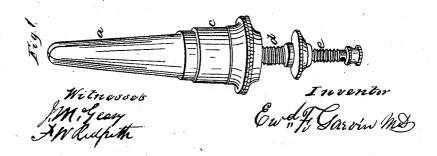
## E. F. Garrin, Treating Fistula,&c. IV<sup>9</sup>84,815. Patented Dec.8,1868.









## UNITED STATES PATENT OFFICE.

EDWARD F. GARVIN, M. D., OF NEW YORK, N. Y.

## IMPROVED INSTRUMENT FOR TREATING FISTULA, &c.

Specification forming part of Letters Patent No. 84,815, dated December 8, 1863.

To all whom it may concern:

Be it known that I, EDWARD F. GARVIN, M. D., of the city and county of New York, and State of New York, have invented a new and useful instrument for medicinal and surgical purposes, to be entitled "A Chemical and Surgical Eradicator for Fistula, Hemorrhoids, &c.; and I do declare that the following is a full, clear, and exact description of the construction and operation of the same, referring to the accompanying drawings, be-

ing a part of the specifications.

Figure 1 is a perspective view of the instrument with the expander e and plunger d withdrawn as far as possible, showing the slotted pipe in its natural position. Fig. 2 is a view of the pipe, with the plunger and expander screwed home and the slots expanded or opened partially. Fig. 3 is a longitudinal sectional view of the whole, showing the form of the conical tube a, with slot b, and its application to the cap c by means of screw i. This cap shows the supplementary supply-chamber f and the plunger g, which only operates in chamber f. It also exhibits the expander h, which passes through the plunger g and chamber f into the conical tube a. Fig. 4 is the same view, showing more fully the supplementary chamber f, with plunger screwed up to the top of the chamber, resting on the lower edge of the conical tube or pipe a when attached to the cap c. The expander h is shown as turned up into the conical tube, expanding the same.

The nature of my invention consists in a new article of manufacture formed of caoutchouc, gutta-percha, vulcanite, wood, metal, or any material of sufficient hardness and strength to be used for chemical, medicinal, and surgical purposes in the operation upon and eradication of hemorrhoids, fistula, internal or external, enabling the operator to deposit dry powdered material of any medicinal kind or quality, or unguents of any medicinal quality or consistency, to the parts affected

and for the purposes set forth.

Its operation consists in forcing any material placed in the supplementary chamber f by means of the plunger g into and through the conical tube a, to be deposited upon the affected parts as it passes through the slots b. The expander h is not solid, but has orifices to permit the material to freely pass through it, the office of the expander being to spread out and enlarge the tube a, so as to freely open and expose the affected parts to the action of the remedial agent. It is intended to be employed in case of strictura ani also, and for this purpose the instrument may be of any required length or size, and may be used without any medicinal substance.

The design of the instrument is to operate upon the anus and larger intestine for any disease peculiar to those parts—for itching scrofularia, strictures, hemorrhoids, or piles, (bleeding, blind, or protruding,) fistula, or fis-

tulous pipes, pedical, &c.

Having thus described my invention, what

I claim, and desire to secure, is-

1. The hollow conical slotted tube *a*, with two or more slots, substantially as and for the purposes described.

2. The cap c, having the chamber f below tube a, substantially as and for the purposes

described.

3. The plunger g, operating in the supplementary chamber f, also expander h, both operating with or without screws, substantially as and for the purposes described.

4. An expander, h, of equal diameter, operating in a conical tube of unequal diameter, as and for the purposes substantially as rep-

resented.

5. All the parts of the described instrument, singly or in combination, as and for the purposes described.

EDWD. F. GARVIN, M. D.

Witnesses:

J. M. GEARY, F. W. REDPATH.