

No. 627,658.

Patented June 27, 1899.

R. K. SMITHER.
OINTMENT INJECTOR.
(Application filed Dec. 5, 1898.)

(No Model.)

Fig. 1.

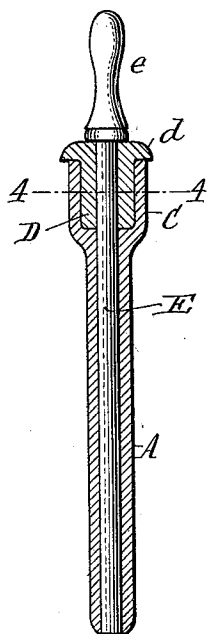


Fig. 2.

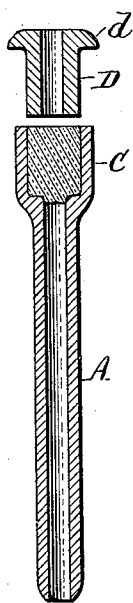


Fig. 3.

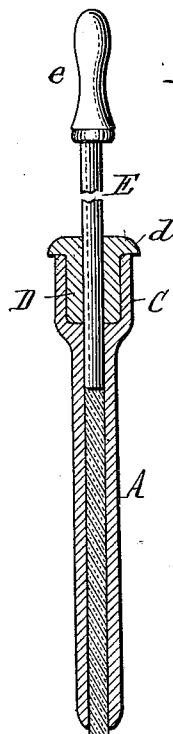


Fig. 5.

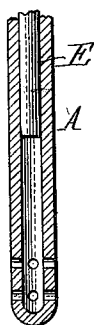


Fig. 4.

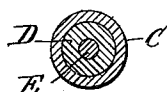
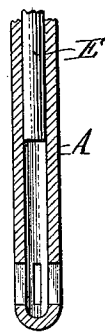


Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

ROBERT K. SMITHER, OF BUFFALO, NEW YORK.

OINTMENT-INJECTOR.

SPECIFICATION forming part of Letters Patent No. 627,658, dated June 27, 1899.

Application filed December 5, 1898. Serial No. 698,363. (No model.)

To all whom it may concern:

Be it known that I, ROBERT K. SMITHER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Suppositories or Ointment-Injectors, of which the following is a specification.

This invention relates to an injector or suppositor for introducing an ointment or other medication into the orifices of the body—such, for instance, as the rectum in the treatment of piles.

The object of my invention is the provision of an inexpensive instrument of this character which is readily charged or prepared for use and by which a predetermined quantity of the desired medication can be conveniently injected.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation of my improved suppositor, showing the plug or follower and the plunger fully inserted in the instrument. Fig. 2 is a similar view showing the ointment-chamber of the barrel filled preparatory to inserting the plug and the plunger. Fig. 3 is a similar view showing the plug inserted and the plunger partly pressed into the barrel. Fig. 4 is a cross-section on line 4 4, Fig. 1. Figs. 5 and 6 are fragmentary longitudinal sections showing slightly-modified constructions of the instrument.

Like letters of reference refer to like parts in the several figures.

A is a cylindrical tube or barrel forming the body of the instrument and having a rounded front end or nozzle to facilitate its entrance into an orifice of the body. The bore of the barrel extends from end to end thereof.

C is a bulb or hollow enlargement arranged at the rear end of the barrel and forming a chamber adapted to receive the ointment or medication to be applied to the affected part. The front end of this chamber communicates with the bore of the barrel A, while its rear end is open and adapted to receive a plug or follower D, whereby the ointment placed in the chamber is forced into the cavity of the barrel. This plug has at its outer end a flange or rim *d*, which bears against the rear end of the ointment-chamber when the plug

is fully inserted therein, as shown in Figs. 1 and 3.

E is a rod or plunger adapted to be inserted in the barrel of the instrument for ejecting the ointment therefrom and depositing it upon the part or surface under treatment. This plunger is of the proper size to snugly fit the bore of the barrel, and the plug or follower is provided with an opening for the passage of the plunger, which opening is arranged in line with the bore of the barrel and closely fits the plunger. The plunger is provided at its rear end with a knob or handle and is preferably made of such length that when the same is pressed into the barrel until the inner end of its knob comes in contact with the plug D the front end of the plunger is flush with or projects slightly beyond the nozzle of the barrel, so as to discharge the entire contents of the latter.

In the use of the suppositor the plug and the plunger are removed and the desired amount of medication is placed in the ointment-chamber C. The plug is then pressed fully into the chamber, the plunger-opening of the plug being at the same time closed by the finger, thus forcing the entire contents of the chamber, except the ointment which enters the cavity of the plug, into the barrel of the instrument. The plunger is now passed through the plug into the barrel and pressed until the medication appears at the nozzle of the suppositor. The barrel is then inserted in the orifice or passage of the body to be treated and the plunger is pressed into the barrel to its limit, thus expelling the entire contents of the barrel.

In applying remedies to the rectum, as in the treatment of piles, it is desirable to insert the suppositor beyond the sphincter before beginning to discharge the medication and then gradually withdraw the instrument, at the same time pressing the plunger into the barrel to deposit the ointment along the surface of the bowel.

By providing the instrument with a chamber independent of the barrel in which the ointment is placed preliminary to forcing it into the barrel the instrument can be conveniently and accurately charged with the desired predetermined quantity of medication, and as the chamber can be wholly emp-

1 tied by the insertion of the plug and the
plunger the proper application of the entire
contents of the suppositor is insured.

5 If desired, the barrel may be closed at its
front end and provided in its side, near its
end, with perforations, as shown in Fig. 5, or
with slots, as shown in Fig. 6, whereby the
medication is discharged in a lateral direc-
tion.

10 I claim as my invention—

15 A suppositor or injector comprising a bar-
rel provided at one end with a discharge-
opening and at its opposite end with a cham-
ber or enlargement for the medication, which
chamber is open at its rear end, a removable

plug or follower constructed to fit closely into
said chamber and adapted to be inserted
therein for forcing the medication from the
chamber into said barrel, and a plunger con-
structed to closely fit the bore of the plug and 20
of the barrel and adapted to be inserted there-
in behind the material forced into it, for ex-
pelling the material therefrom, substantially
as set forth.

Witness my hand this 30th day of Novem- 25
ber, 1898.

ROBERT K. SMITHIER.

Witnesses:

JNO. J. BONNER,

JOHN G. GOTTWEIN.