

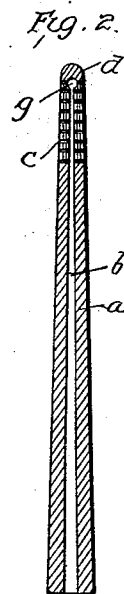
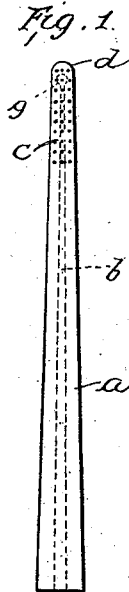
No. 701,587.

Patented June 3, 1902.

A. LEVY.  
APPLICATOR.

(Application filed Feb. 9, 1901.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

ALEXANDER LEVY, OF HAGENAU, GERMANY.

## APPLICATOR.

SPECIFICATION forming part of Letters Patent No. 701,587, dated June 3, 1902.

Application filed February 9, 1901. Serial No. 46,660. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER LEVY, a subject of the Emperor of Germany, residing at Hagenau, Province of Alsace, German Empire, have invented new and useful Improvements in Applicators, of which the following is a full specification.

This invention relates to a means or appliance for conveying and introducing medicaments—such, for instance as causticizing solutions—into parts of the human body which are difficult of access, massage being simultaneously applied. The parts more particularly in question are the masculine urethra, the uterus, the nasal cavity, and the like.

The essential feature of the invention consists in the head of the instrument being traversed for a certain length by numerous capillary passages which are intended to receive medicaments and to easily discharge same again when a slight pressure is applied.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a central longitudinal section.

The medicament-carrier has the shape of a catheter of ordinary length and caliber and is designated *a* in the drawings. It is made of soft rubber. Inside there is a central longitudinal bore *b*, serving for guiding the instrument, and a silver wire (not shown) of suitable thickness may be employed for the guidance.

The head of the instrument, according to requirements, is provided for a distance with a plurality of fine intercommunicating passages *c*, which open to the exterior of the instrument. The central bore extends up into proximity to the end *d*, where it may be slightly enlarged, as shown at *g*, but does not communicate with the passages.

When in use, the head of the catheter is immersed in the medicinal solution—for in-

stance, a twenty-per-cent. solution of protargol—so that the capillary tubes become filled with the solution. The instrument is then inserted in the part to be treated, and the liquid contained in the capillary tubes is discharged by means of the slight friction at the sides, so that the results of the use of the instrument arise from the use of a causticizing solution, together with a simultaneous massaging caused by moving the soft-rubber instrument forward and backward and rubbing it at the sides. The silver wire which is used may have an enlarged head or end, which is introduced into the recess *g*, and when the instrument is in place if the parts are too sore or inflamed for direct massage the moving of the wire within the bore or tube will cause indirect massage on the parts to be treated, at the same time facilitating the discharge of the caustic medicament.

What I claim is—

1. In an instrument for introducing liquid medicaments the combination of a straight catheter made of soft india-rubber tapering toward the end, which is closed, and having numerous fine capillary apertures opening externally and a central longitudinal bore, having no communication with the capillary apertures, essentially as described.

2. In an instrument for introducing liquid medicaments the combination of a straight catheter made of soft india-rubber having a heart-shaped head, which is closed, and having numerous fine capillary apertures opening externally and a central longitudinal bore, having no communication with the capillary apertures, essentially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ALEXANDER LEVY.

Witnesses:

FRANZ FATSCHER,  
ROBERT MÜLLER.