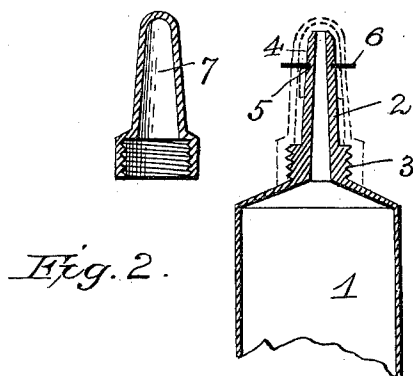
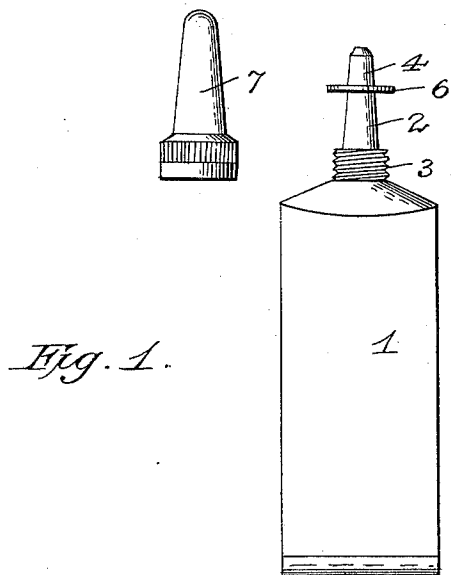


(No Model.)

A. F. RICHARDSON.
NASAL INJECTOR.

No. 600,449.

Patented Mar. 8, 1898.



Witnesses:
F. L. Durand
James H. Jones

Inventor:
Alonzo F. Richardson
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UNITED STATES PATENT OFFICE.

ALONZO FRANK RICHARDSON, OF NEW YORK, N. Y.

NASAL INJECTOR.

SPECIFICATION forming part of Letters Patent No. 600,449, dated March 8, 1898.

Application filed November 3, 1897. Serial No. 657,244. (No model.)

To all whom it may concern:

Be it known that I, ALONZO FRANK RICHARDSON, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Nasal Injectors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to nasal injectors for containing medicines or remedies for the cure of catarrh, which are injected into the nostrils by pressure upon the tube, which tube is made of metal foil, after the manner of paint-tubes for holding artists' colors. The object of the invention is to provide an improved nozzle or point for such nasal injectors which shall possess superior advantages with respect to efficiency in use.

The invention consists, essentially, in a tube of metal foil with a disk of more rigid metal at the upper end, a lengthened nozzle secured thereto, screw-threaded at the base and reduced and plain from said screw-threaded portion to the point, so as to be extended well up into the nostril, a rubber or other elastic disk connected with said tube intermediate its ends, and the cap screw-threaded at one end to engage with the screw-threads of said nozzle, as hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is an elevation of a nasal injector constructed in accordance with my invention, the cap being removed and shown at one side thereof. Fig. 2 is a vertical section of the same.

In the said drawings the reference-numeral 1 designates a tube of thin metal or foil capable of being easily compressed by the fingers, so as to expel the contents. The upper end of this tube is secured to a disk of thicker metal, so as to be comparatively rigid.

Secured to this disk is a nozzle 2, with an enlarged and screw-threaded base or inner end 3, the remaining portion 4 being made plain and tapering. This tapering portion of the nozzle is of a length sufficient to extend well up into the nostrils, and intermediate its end is formed with a peripheral groove 5, with which engages a rubber or other elastic disk 6 for preventing the point of the nozzle from coming in contact with the nostrils and thereby injuring the same.

The numeral 7 designates a cap corresponding in shape with the nozzle and screw-threaded to engage with the screw-threaded base 3.

In practice the cap is removed and the nozzle inserted in the nostril. The tube is then pressed between the fingers and thumb, which will expel the medicine contained therein and inject it into the nostril.

Having thus fully described my invention, what I claim is—

1. In a nasal injector, the combination with the compressible tube of metal foil and the tapering nozzle formed with a peripheral groove intermediate its ends, of the elastic disk fitting over said nozzle and engaging with said groove, substantially as described.

2. In a nasal injector, the combination with the compressible tube of metal foil, the rigid metal disk at the upper end thereof, the tapering nozzle formed with an enlarged screw-threaded base secured to said disk and said nozzle intermediate its ends formed with a peripheral groove, of the elastic disk engaging with said groove and the screw-threaded cap fitting over said nozzle and engaging with the base thereof, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ALONZO FRANK RICHARDSON.

Witnesses:

ESTHER V. BYNG,
BENNETT S. JONES.