

No. 645,566.

C. H. MURPHEY.

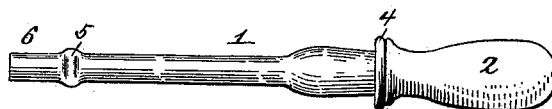
Patented Mar. 20, 1900.

DEVICE FOR INJECTING POWDERS INTO THE NASAL PASSAGES.

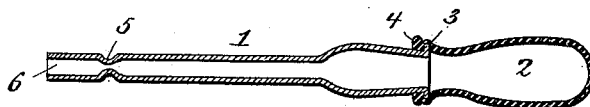
(Application filed May 16, 1899.)

(No Model.)

*Fig. 1,*



*Fig. 2,*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## DEVICE FOR INJECTING POWDERS INTO THE NASAL PASSAGES.

SPECIFICATION forming part of Letters Patent No. 645,566, dated March 20, 1900.

Application filed May 16, 1899. Serial No. 717,033. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. MURPHEY, a citizen of the United States, residing at Madisonville, in the county of Hopkins and State of Kentucky, have invented certain new and useful Improvements in Devices for Injecting Powders into the Nasal Passages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in devices for injecting powders into the nasal passages; and it consists in the novel construction of the device.

The object of my invention is to improve, simplify, and cheapen the devices employed for injecting medicinal powders into the nasal and other passages and cavities of the human body. This object is attained in the device for that purpose herein described, and illustrated in the drawings which accompany and form a part of this specification, in which the same reference-numerals indicate the same or corresponding parts, and in which—

Figure 1 is an external view of the device, and Fig. 2 is a central longitudinal section thereof.

My device for injecting medicinal powders into the nasal cavities consists of a tube, preferably made of glass, to which is attached a rubber bulb. The main portion of this tube is of a size adapted to permit of its ready insertion into the nostrils, and near the outer end of this portion of the tube there is a contraction in the bore of the tube, formed by pressing the walls inward. This contraction serves to prevent the passage of powder beyond it into the rubber bulb, converting the outer portion of the tube into a capsule for the reception of the powder, while the contraction does not prevent the passage of air. By its position the contraction determines the size of the dose. At its other end the tube is enlarged, so as to adapt it for connection to a rubber bulb.

In the drawings, 1 is the tube, which forms

the main portion of the device, and 2 is an ordinary compressible rubber bulb. That end of the tube 1 to which the bulb 2 is attached is enlarged and is provided with a flange 3, which, fitting into the mouth of the bulb 2 beyond the rib 4, which surrounds the mouth of said bulb, forms, with the bulb, an air-tight joint.

The main portion of the tube 1 is of a size to permit its ready insertion into the nostrils, and near the outer end of the tube there is a contraction 5, formed by pressing the sides of the tube together while the glass is hot. The contraction does not completely close the bore of the tube, sufficient space for the passage of air being left; but it effectually prevents the passage of any considerable portion of a charge of powder beyond said contraction, converting the outer portion of the tube 1 into a capsule 6 for the reception of the powder.

The device is used as follows: The end of the tube 1 is inserted into a bottle or receptacle containing the powder to be injected and is pressed down into the powder until the capsule 6 is filled. The tube 1 is then inserted into a nostril and the bulb 2 quickly compressed. The air thus forced out through the tube 1 forces the powder in the capsule 6 up into the nasal passage.

Having thus completely described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A device for injecting powders, consisting of a tube having in its bore a contraction by which the passage of powder through the bore is prevented, without preventing the passage of air, and having a mouth larger than said contracted portion of the bore, so that the powder may be inserted in the end of the tube, and provided with means for forcing air through the tube, substantially as described.

2. A device for injecting powders, consisting of a tube, enlarged at one end for the reception of a compressible bulb, flanged to form a tight joint with said bulb, contracted near the other end to form a receptacle for

the retention of powder, and having a mouth  
larger than the contracted portion of its bore,  
so that the powder may be inserted in said  
mouth, and a compressible bulb secured to  
5 the enlarged end of said tube, substantially  
as described.

In testimony whereof I have hereunto af-

fixed my signature in the presence of two wit-  
nesses.

CHARLES H. MURPHEY.

Witnesses:

THOS. B. BONE,  
ED. KIRKWOOD.