

No. 805,851.

PATENTED NOV. 28, 1905.

N. J. GOLDFARB.
MEDICINAL INJECTOR.
APPLICATION FILED MAY 16, 1905.

Fig. 1.

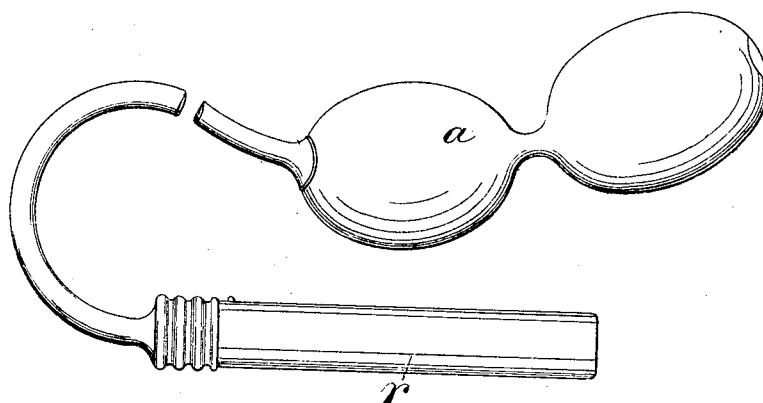


Fig. 2

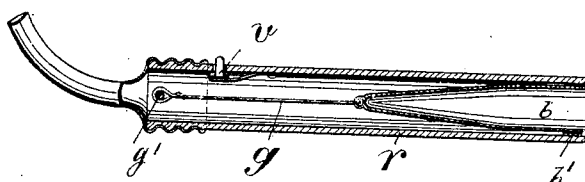
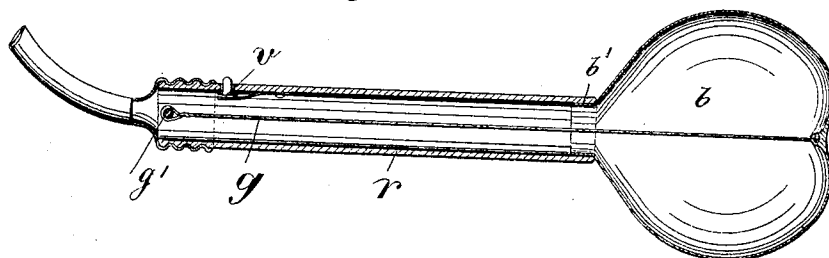


Fig. 3



Witnesses:
William Schuch.
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Inventor
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by his attorney
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UNITED STATES PATENT OFFICE.

NATUSIUS JOSEF GOLDFARB, OF DÜSSELDORF, GERMANY.

MEDICINAL INJECTOR.

No. 805,851.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed May 16, 1905. Serial No. 260,620.

To all whom it may concern:

Be it known that I, NATUSIUS JOSEF GOLDFARB, a subject of the German Emperor, residing at Düsseldorf, Germany, have invented new and useful Improvements in Medicinal Injectors, of which the following is a specification.

This invention relates to an injector for readily introducing salves, powders, and similar medicinal substances into a human or animal body. The injector may be used for introducing the medicinal substances into the throat, vagina, or into such parts of the body as would otherwise be accessible only by means of a surgical operation.

In the accompanying drawings, Figure 1 is a side view of my improved medicinal injector; Fig. 2, a longitudinal section thereof with the bulb omitted and showing the diaphragm drawn into the tube, and Fig. 3 a similar section showing the diaphragm projected out of the tube.

The letter *r* indicates a flexible or rigid tube which communicates at one end with a bulb *a* or with other means for supplying air under pressure. At its other end there is secured to the tube a diaphragm or ball *b* by means of a suitable fastening *b'*. This diaphragm is of such a size that it may either be drawn into the tube, Fig. 2, or projected out of the same, Fig. 3. At its center the diaphragm *b* is connected to a pin *g'*, within tube *r*, by a spring or flexible string *g*, which serves to draw the diaphragm into the tube. A valve *v*, seated within an opening of tube *r*, controls the escape of air from the latter.

In use the salve or other medicine or liniment is placed into the pocket formed by the diaphragm *b*, and the tube is inserted into the throat or other opening. Air is then forced by bulb *a* through the tube and against the inner face of the diaphragm to project the latter out of the tube and carry the salve to the place desired within the interior of the body. After the salve has thus been deposited the valve *v* is opened to collapse the diaphragm and cause its return to tube *r* by spring *g*, after which the instrument is withdrawn. The diaphragm when distended may be of such a size and form as to fill the cavity within which it is introduced either partly or completely.

What I claim is—

1. A medicinal injector composed of a tube, means for forcing air into the same, a diaphragm secured to the tube and adapted to be projected beyond the same, and a spring for retracting the diaphragm into the tube, substantially as specified.

2. A medicinal injector composed of a tube, means for forcing air into the same, a diaphragm secured to the tube and adapted to be projected beyond the same, a spring connected to the diaphragm, and a valve for discharging air from the tube, substantially as specified.

Signed by me at Düsseldorf, Germany, this 1st day of May, 1905.

NATUSIUS JOSEF GOLDFARB.

Witnesses:

PETER LIEBER,
WILLIAM ESSENWEIN.