

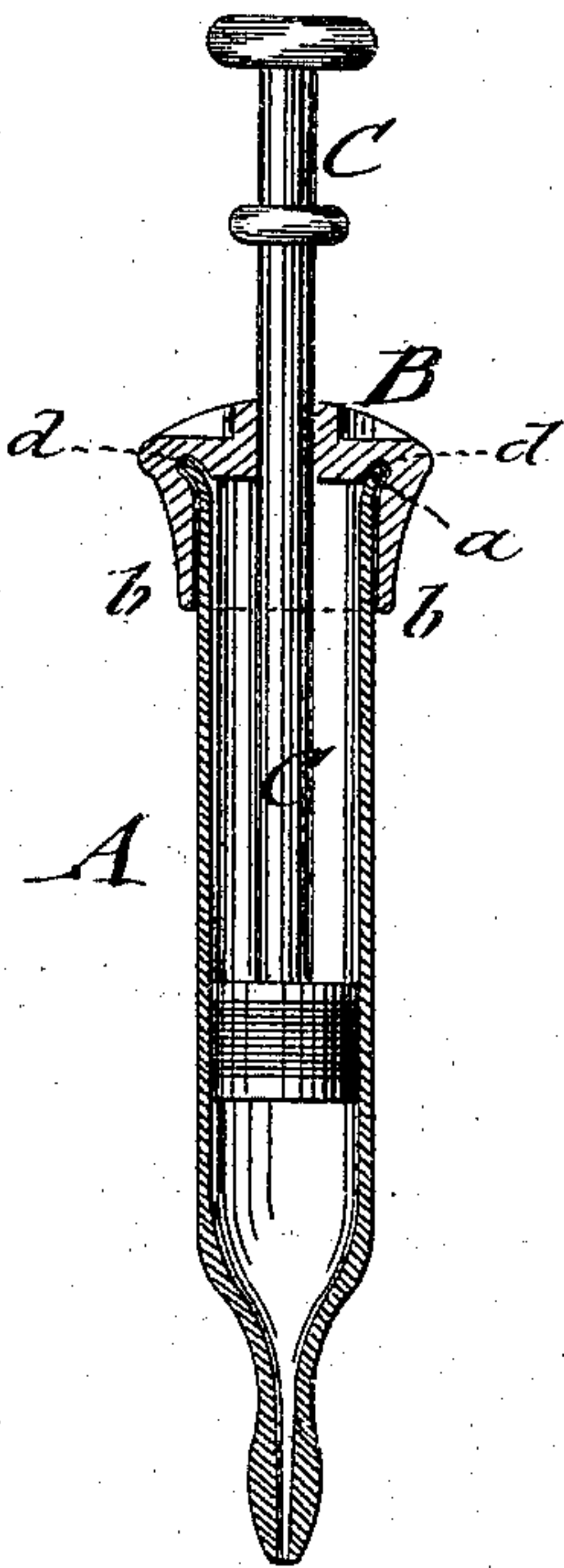
R. VAN DER EMDE.

SYRINGE.

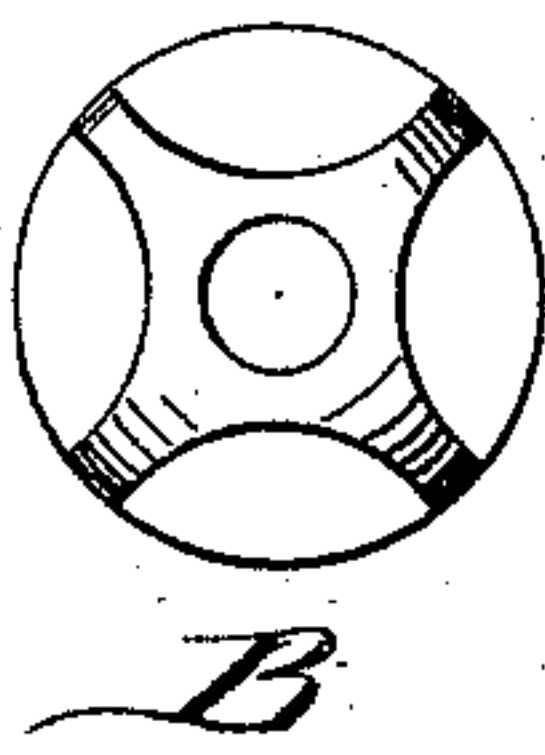
No. 173,850.

Patented Feb. 22, 1876.

*Fig: 1.*



*Fig: 2.*



WITNESSES:

*Chas. Nida*  
*John Goethals*

INVENTOR:

*R. Van der Emde*

BY

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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

REINHOLD VANDER EMDE, OF NEW YORK, N. Y.

## IMPROVEMENT IN SYRINGES.

Specification forming part of Letters Patent No. **173,850**, dated February 22, 1876; application filed January 22, 1876.

*To all whom it may concern:*

Be it known that I, REINHOLD VANDER EMDE, of the city, county, and State of New York, have invented a new and Improved Syringe, of which the following is a specification:

Figure 1 represents a vertical central section of a syringe with my improved cap attachment, and Fig. 2 is a top view of the detachable cap of the same.

Similar letters of reference indicate corresponding parts.

My invention relates to an improvement in syringes, by which the piston may be readily taken out and refitted, and by which a superior guide and stuffing-box for the piston-rod are furnished.

The invention consists in improving upon the ordinary syringe-caps, made of soft rubber, by using a centrally-perforated exterior cap, provided with a flange that fits around the end, and an interior groove that fits over the rim of the barrel, as hereinafter described.

In the drawing, A represents the barrel of the syringe, which is made of any suitable material, and provided with a circumferential ring at the rear end, to which a cap-piece, B, of rubber or other suitable material, is ap-

plied. The cap-piece B is provided with a rim or flange, *b*, that fits around the end of the barrel, and has an interior groove, *d*, for being tightly seated on the rim of the barrel: A central perforation of the cap-piece serves to insert and guide the piston-rod C, the cap-piece fitting firmly around the rod, forming a stuffing-box for the same.

The rubber cap-piece may be readily detached from the barrel for the purpose of leathering or refitting the piston, which may thus always be kept in working order, so as to avoid the annoying getting loose of the piston in the barrel, and the inefficient working of the syringes at present in use.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with barrel A, having flange *a*, and the piston-rod C, of the centrally-perforated exterior cap B, provided with a flange, *b*, fitting around the end of barrel, and an interior groove, *d*, over rim of the same, as and for the purpose specified.

REINHOLD VANDER EMDE.

Witnesses:

PAUL GOEPEL,  
T. B. MOSHER.