

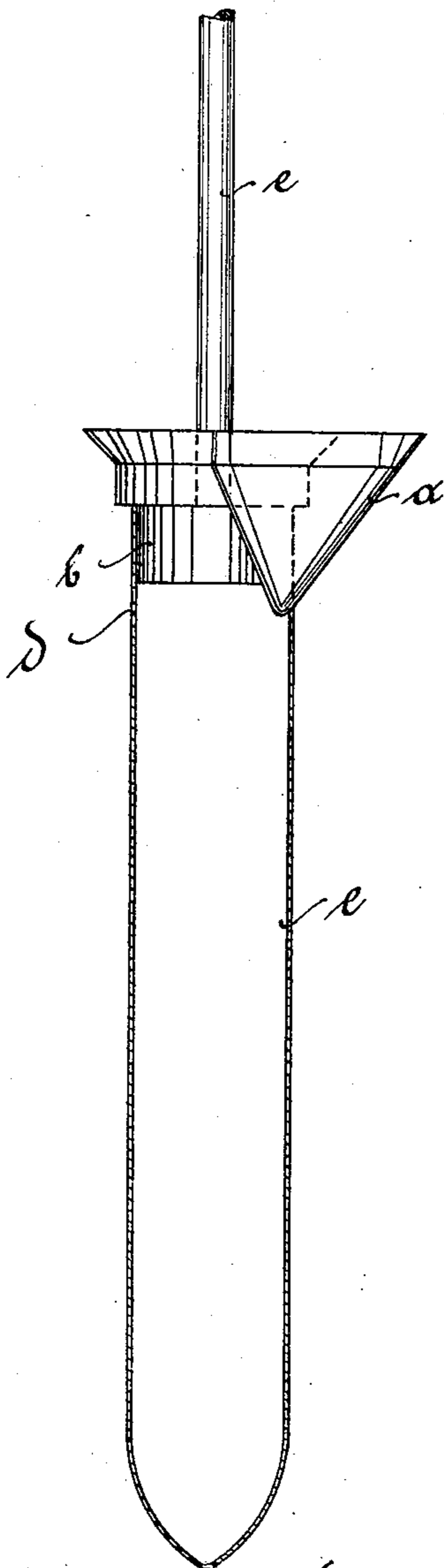
No. 742,434.

PATENTED OCT. 27, 1903.

E. HRISS.  
SYRINGE.

APPLICATION FILED JAN. 21, 1903.

NO MODEL.



Witnesses.

*H. Mori.*  
*E. Waldman*

Inventor.

*Engelbert Hrisss.*

*by P. Singer.*

Att'y.

# UNITED STATES PATENT OFFICE.

ENGELBERT HRISS, OF FRANKFORT-ON-THE-MAIN, GERMANY.

## SYRINGE.

SPECIFICATION forming part of Letters Patent No. 742,434, dated October 27, 1903.

Application filed January 21, 1903. Serial No. 139,974. (No model.)

*To all whom it may concern:*

Be it known that I, ENGELBERT HRISS, merchant, a subject of the Emperor of Austria-Hungary, and a resident of Frankfort-on-the-  
5 Main, Germany, have invented certain new and useful Improvements in Syringes, of which the following is a specification.

The object of this invention is a syringe having a funnel for the purpose of charging  
10 or filling the same with liquid arranged on the side of the tube, the latter being otherwise of the usual shape and construction. An air-vent may be provided in the upper part of the tube.

15 The accompanying drawing represents a syringe constructed according to my invention, the several parts being designated by reference-letters, as follows:

*a* is the funnel; *b*, the piston; *c*, the tube  
20 or reservoir; *d*, the vent-hole; *e*, the piston-rod. The charging-funnel *a* is placed on the side of the tube or reservoir at the upper end thereof and in such a manner that it discharges itself into the said tube or reservoir  
25 *c* immediately below the piston *b* when the latter is drawn to the top of the tube. A slight pressure on the piston causes it to stop the funnel-opening, and then the syringe acts in the usual manner. The air escapes through  
30 the hole *d*, provided on the side of the tube opposite to the funnel.

The end in view was to produce a syringe with simple means for charging same, avoiding any complicated structure which might  
35 permit the accumulation of matter, while providing a remedy for the common objection to existing syringes—namely, that they cannot be charged directly from a medicine-bottle, owing to the usual narrow neck of the latter.

40 The syringe of my invention fulfils all these requirements and, moreover, is adapted to general use and not merely for use by the medical faculty.

The invention is distinguished, first, by its  
45 simplicity; second, by the fact that the fun-

nel enables the syringe to be charged direct from an ordinary medicine-bottle; third, by the novelty of providing a syringe with a funnel on the side opening into the tube just below the piston when in its highest position; 50 fourth, by the novel use of a funnel for the charging of a medical syringe; fifth, by providing a remedy for the acknowledged difficulty of filling ordinary syringes from a medicine-bottle through the piston-pipe, which 55 must be again hermetically closed, or by a suction-pipe or by other means.

None of the syringes hitherto introduced possess the hereinbefore-described advantages. My method of construction may there- 60 fore claim to be a distinct advance in the art from a practical point of view, and, although there may not appear to be any great difference, theoretically speaking, between my method of construction and other well-known 65 syringes, still the industrial value of the invention in providing a syringe adapted for general use by its easy operation is undoubtedly important.

Having described my invention, what I 70 claim as new, and desire to secure by Letters Patent, is—

The combination in a syringe of a tubular member provided with a discharge-orifice at one end, a piston provided with a piston-rod, 75 for said tubular member, a funnel secured at the top of said tubular member and adapted to discharge into the same for filling, a vent-hole in said tubular member substantially at the same height as the funnel-inlet, said vent 80 and inlet being open when the piston is in a raised position, and adapted to be closed thereby as it is pressed into the tube.

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

ENGELBERT HRISS.

Witnesses:

ERNST PFESTROFF,  
JEAN GRUND.