

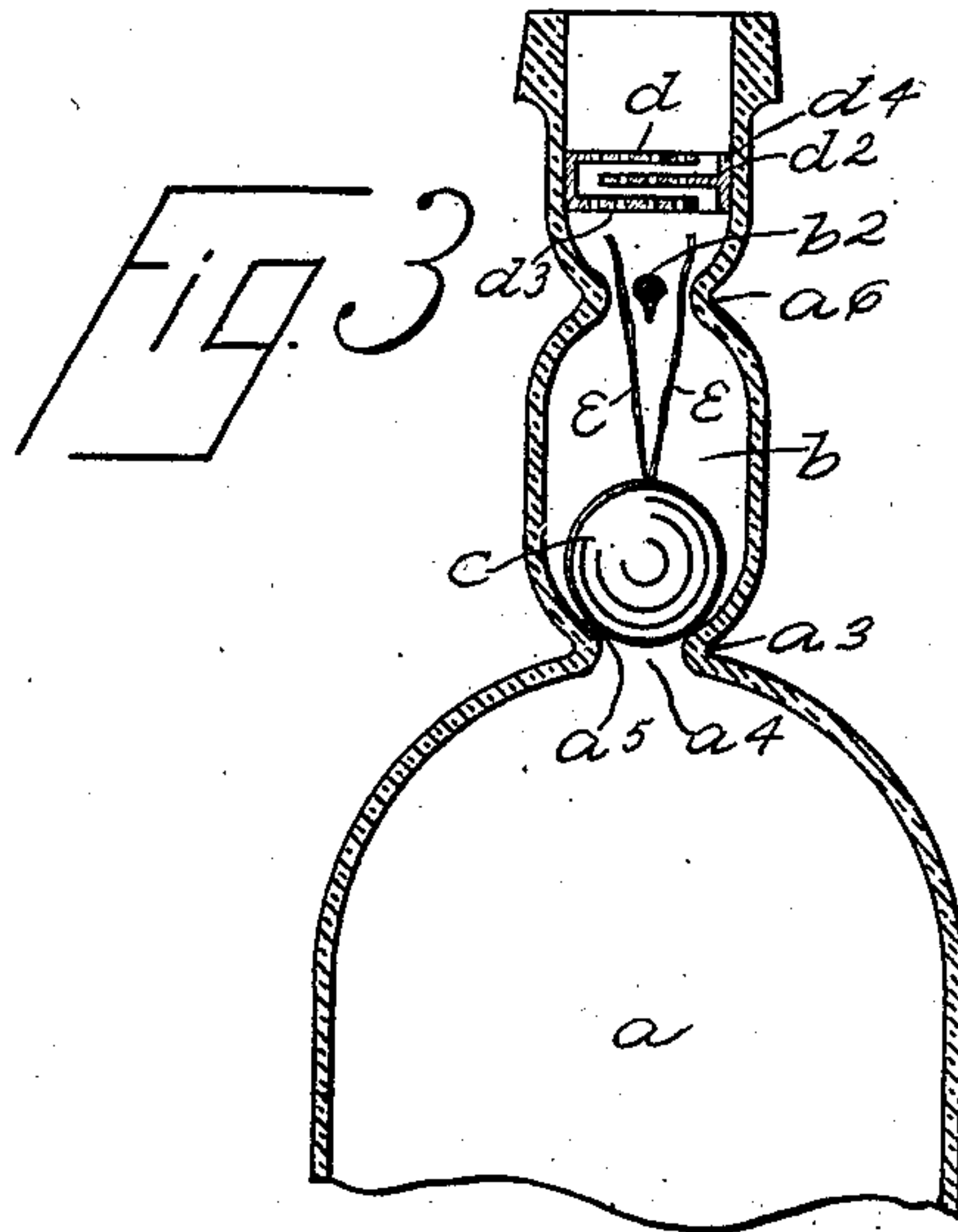
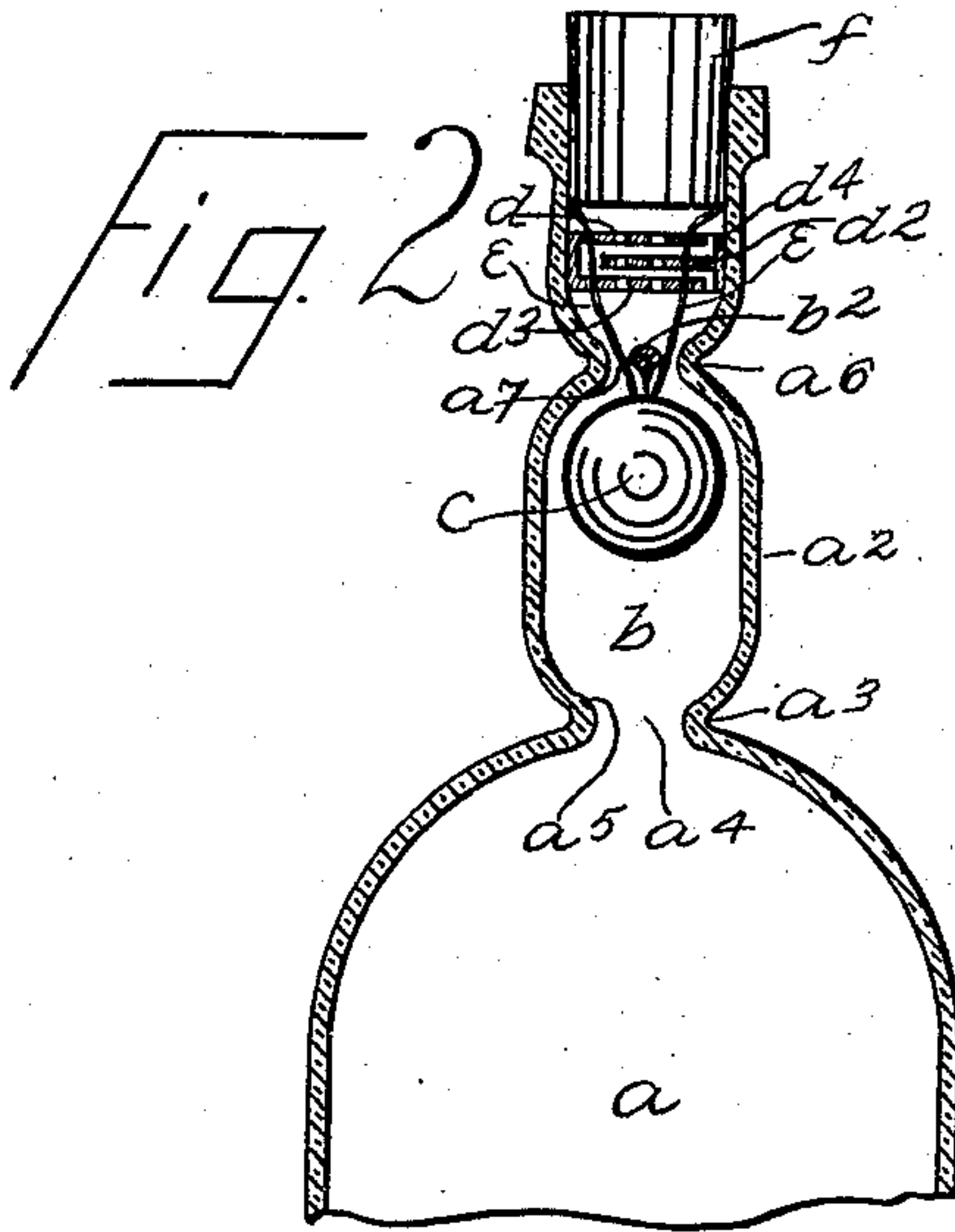
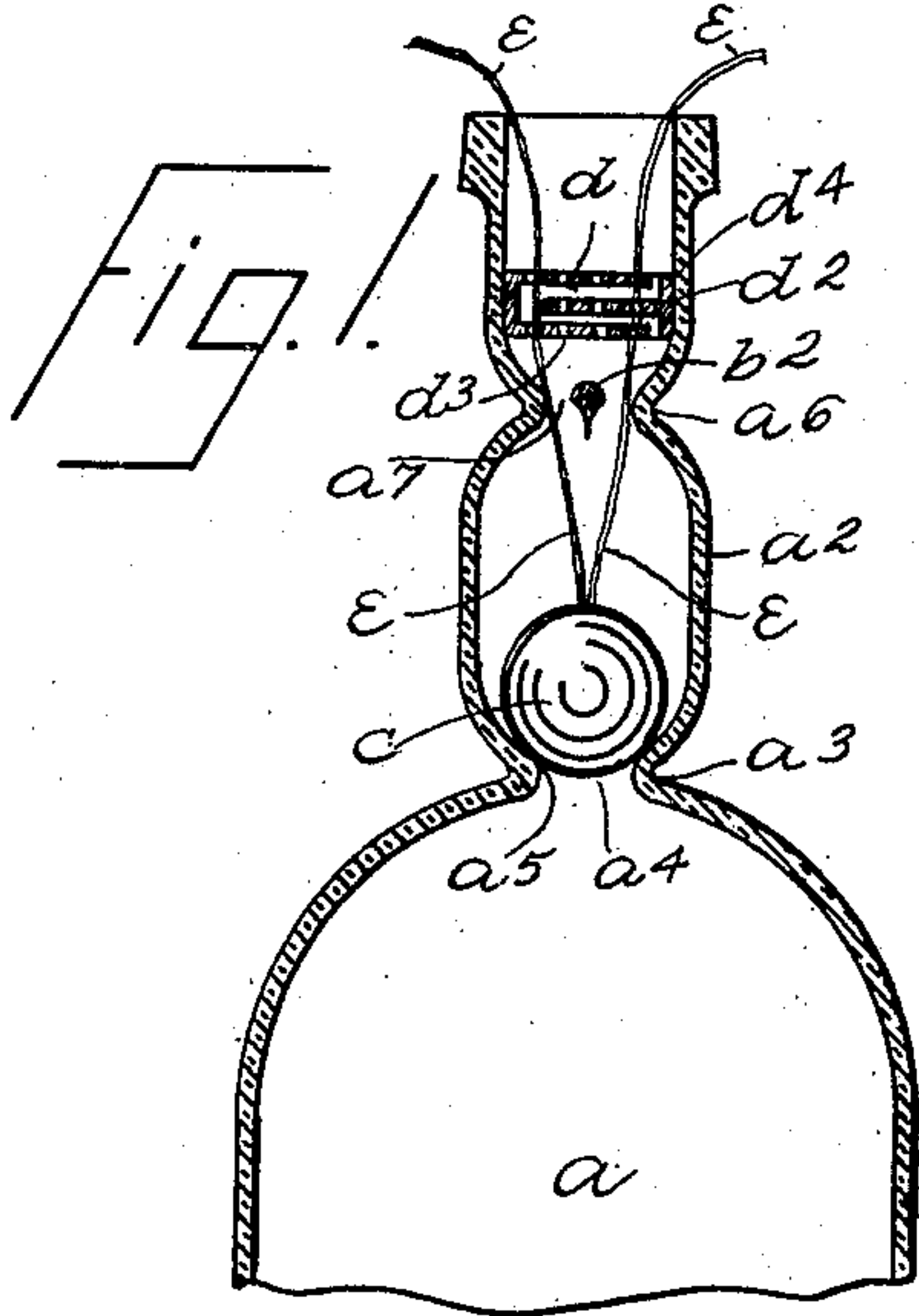
No. 712,183.

Patented Oct. 28, 1902.

J. R. DE ALFI.
NON-REFILLABLE BOTTLE.

(Application filed Apr. 25, 1902.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH R. DE ALFI, OF BROOKLYN, NEW YORK.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 712,183, dated October 28, 1902.

Application filed April 25, 1902. Serial No. 104,609. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH R. DE ALFI, a citizen of Italy, residing at Brooklyn, in the county of Kings and State of New York, have

invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide a bottle, jug, jar, or similar vessel with means whereby the vessel having once been filled and closed may be emptied of its contents, but cannot be refilled or reused.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a central vertical section of the upper part of a bottle provided with my improvement; Fig. 2, a similar view showing the bottle closed, and Fig. 3 a similar view showing the bottle after it has been opened.

In the drawings forming part of this specification I have shown at *a* an ordinary bottle, which is provided with the usual neck *a*², at the bottom of which is an inwardly-directed annular groove *a*³, which forms a port or passage *a*⁴ and a valve-seat *a*⁵. The neck *a* is also provided at a predetermined distance above the valve-seat *a*⁵ with another inwardly-directed annular groove *a*⁶, which forms a port or passage *a*⁷, and by means of this construction a chamber *b* is formed between the ports or passages *a*⁴ and *a*⁷. The chamber *b* is also provided with a spherical valve *c*, adapted to be seated on the valve-seat *a*⁵ and to close the port or passage *a*⁴, and said neck is also provided at the port or passage *a*⁷ with a transverse member *b*², which prevents the valve *c* from closing the port or passage *a*⁷ when the bottle is inverted. The valve *c* may be blown in the neck of the bottle in the usual manner, or said neck of the bottle may be formed in separate parts, which will be secured together in the usual manner.

Secured in the neck of the bottle above the port or passage *a*⁷ are alternately-arranged perforated partition-plates *d*, *d*², and *d*³, and these perforated partition-plates are prefer-

ably formed integrally, as shown at *d*⁴, and the valve *c* is provided with threads or similar cords *e*, which are passed upwardly through the perforated plates *d*, *d*², and *d*³ and out at the mouth of the neck of the bottle, and in practice after the bottle has been filled with the desired contents the valve *c* is drawn up into the position shown in Fig. 2, and the threads *e* are held tight while the stopper *f* is forced into the neck so as to close the bottle, after which the threads or cords *e* are cut off smooth and even at the top of the neck of the bottle.

When it is desired to empty the bottle, the stopper *f* is withdrawn in the usual manner and the valve *c* drops onto the valve-seat *a*⁵, and in this position of the valve it closes the port or passage *a*⁴; but if it is desired to empty the bottle or vessel of a part of its contents all that is necessary is to invert or tilt the bottle in the usual manner, when the valve will move in the direction of the port or passage *a*⁷, and the contents of the bottle will flow out around the valve, as will be readily understood, and this operation may be continued or repeated until the bottle is entirely emptied.

If an attempt be made to refill the bottle by pouring liquids therein, the valve *c* will at once drop upon the valve-seat *a*⁵ and close the port or passage *a*⁴, and said valve may also be made so as to serve as a float, in which event the liquids cannot be forced into the bottle, and the object of the partition-plates *d*, *d*², and *d*³ is to prevent the insertion of a wire, tool, or other instrument for the purpose of raising or interfering with the operation of the valve in an effort to refill the bottle.

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

A bottle or other vessel the neck of which is provided at the bottom thereof with an annular valve-seat forming a port or passage, and at a predetermined distance above the same with an inwardly-directed annular groove forming another port or passage and between which and the valve-seat is an enlarged chamber, a valve placed in said chamber and adapted to be seated on said valve-seat and to close the port or passage therein,

means for preventing the valve from closing
the port or passage at the top of said cham-
ber, a guard secured in the neck above said
chamber and threads connected with the valve
5 and adapted to be passed outwardly through
said guard, substantially as shown and de-
scribed.

In testimony that I claim the foregoing as

my invention I have signed my name, in pres-
ence of the subscribing witnesses, this 23d 10
day of April, 1902.

JOSEPH R. DE ALFI.

Witnesses:

F. A. STEWART,

C. E. MULREANY.