

No. 630,277.

Patented Aug. 1, 1899.

W. W. WEITLING.
ATOMIZER.

(Application filed May 13, 1899.)

(No Model.)

Fig. 1.

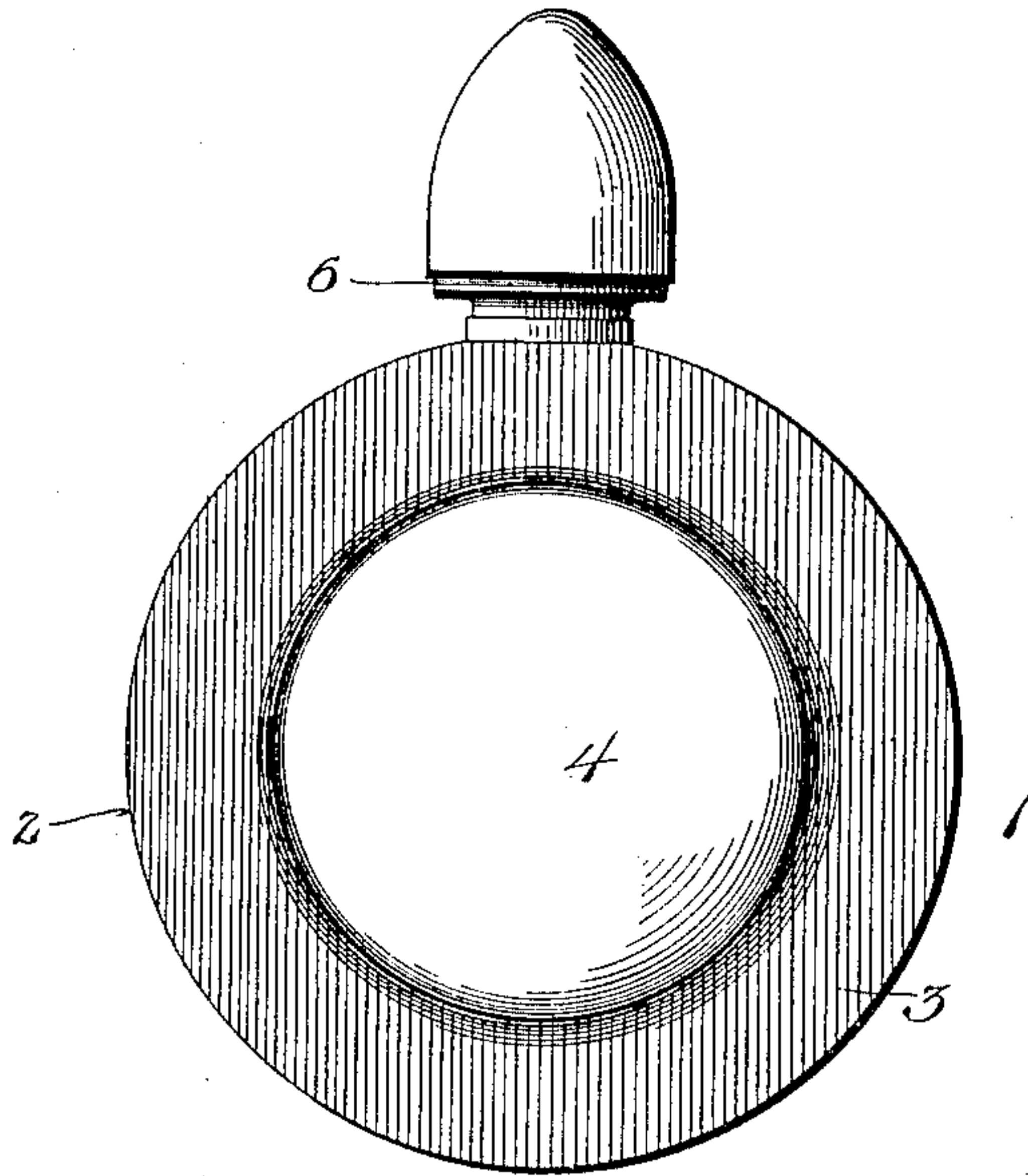


Fig. 2.

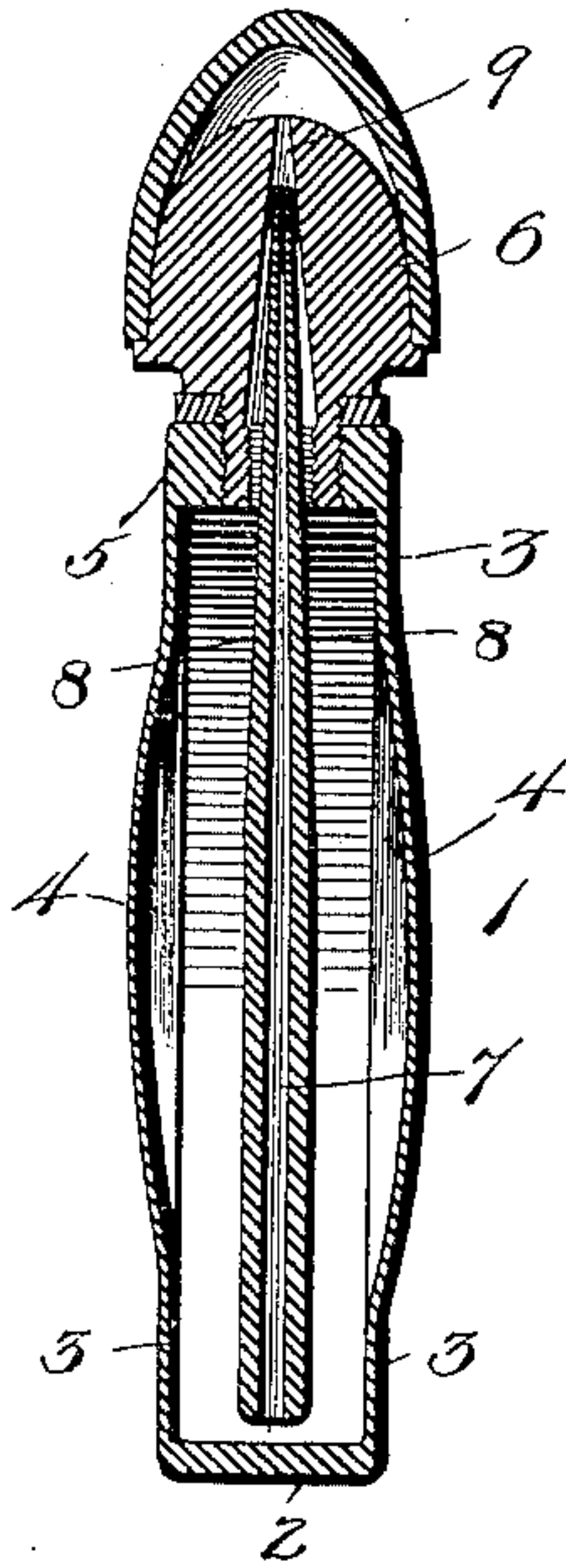
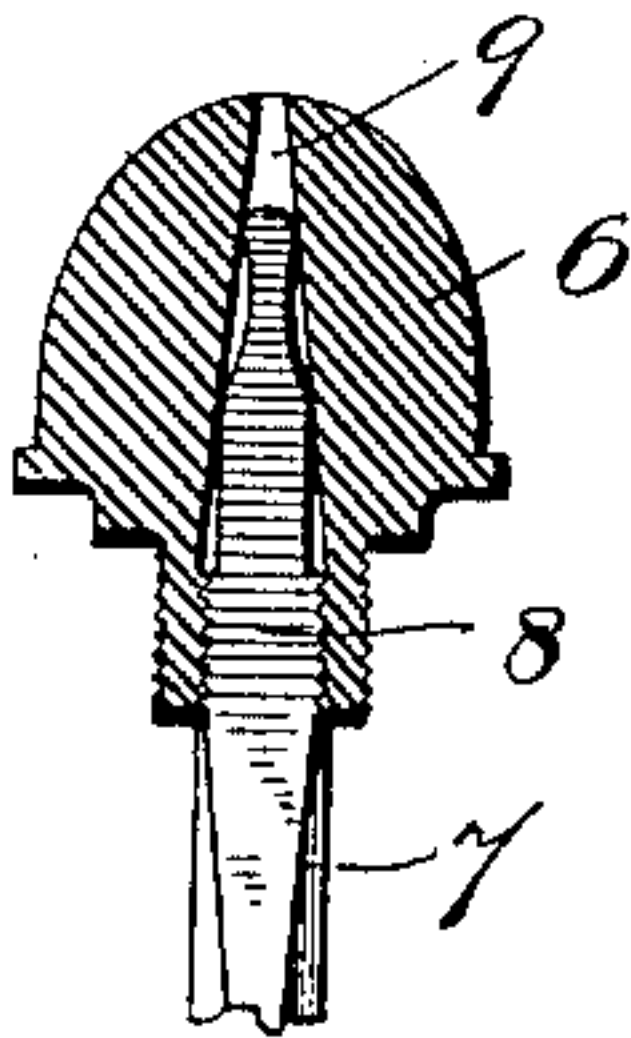


Fig. 3.



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ATOMIZER.

SPECIFICATION forming part of Letters Patent No. 630,277, dated August 1, 1899.

Application filed May 13, 1899. Serial No. 716,711. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. WEITLING, a citizen of the United States, residing at New York, in the borough of Queens and State of New York, have invented a new and useful Improvement in Atomizers; and I do declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the figures on the accompanying drawings, which form a part of this specification.

My invention relates to improvements in atomizers.

Figure 1 represents a side elevation of my improved atomizer. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a detail view of the atomizer device.

The invention consists in the following construction and combination of parts, the details of which will first be fully described and the points of novelty then set forth in the claim.

In the drawings, 1 represents the vial of my improved atomizer and is designed more particularly for pocket use. The vial or receptacle is preferably disk-shaped. It is provided with an annular ring or wall 2, of rigid material, and the opposite sides are flexible or collapsible. This receptacle is made of moldable plastic material. I have found that hard rubber is an excellent composition from which to construct this receptacle. The relatively thinner side walls of the receptacle are joined to the rigid annular wall. The flat thin annular portion 3 joins the wall 2 and a concavo-convex outwardly-projecting portion 4 springs from the flat portion 3, the whole forming flexible resilient side walls which may be compressed by the fingers to expel the contents of the atomizer. The natural spring or resiliency of the side walls after compression serves to throw these walls outwardly to their normal position.

In dealing with plastic composition, such as hard rubber, I have found by actual tests that it is desirable to provide the collapsible sides with a thin flat portion 3 and to have the concavo-convex portion 4 join said flat portion; otherwise there is a tendency of the collapsible sides when made of plastic composition to crack or break.

Where the construction of the opposite sides is made as heretofore described, the flat portion of the walls gives inwardly all around the periphery, thereby preventing the rubber or composition from cracking. Where the concavo-convex walls extend clear to the edge of the wall 2, the compression of the walls is so sharp and abrupt that they rupture. Where the concavo-convex portions join a beaded or embossed peripheral edge, the same tendency to rupture occurs, owing to the varying angles presented.

5 is the collar of the receptacle.

6 is the atomizer device, preferably screwed into the collar 5.

7 is the liquid-tube, adjustably secured to the atomizer device and having flattened portions 8 to permit the introduction and expulsion of air through the atomizer-orifice 9.

What I claim as new, and desire to secure by Letters Patent, is—

In an atomizer having a liquid-tube and an atomizer-tip substantially as described, a receptacle comprising a disk-shaped vial having a rigid relatively thick annular wall and oppositely-disposed relatively thinner collapsible walls, the latter having thick outer annular parallel flat portions with concavo-convex centers joining the flat portions.

In testimony whereof I have affixed my signature in the presence of two witnesses.

WILLIAM W. WEITLING.

Witnesses:

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