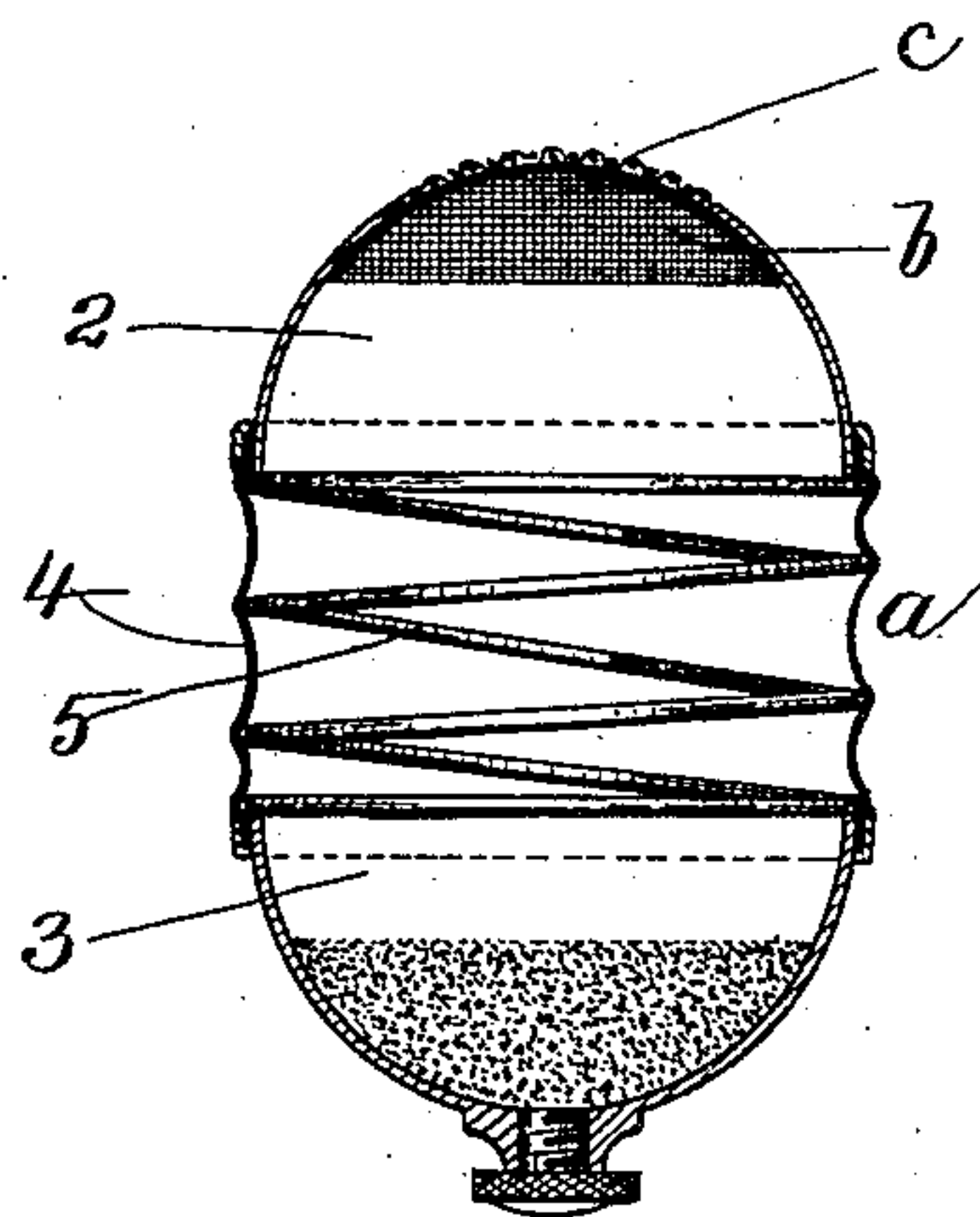


(No Model.)

C. A. SHATTUCK.
POWDER DISTRIBUTER.

No. 421,112.

Patented Feb. 11, 1890.



WITNESSES:
A. D. Harrison
W. B. Ramsey

INVENTOR:
Charles A. Shattuck
by Wright Brown & Crossley
Attys.

UNITED STATES PATENT OFFICE.

CHARLES A. SHATTUCK, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO NORMAN R. MILLER, OF SAME PLACE.

POWDER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 421,112, dated February 11, 1890.

Application filed February 18, 1889. Serial No. 300,244. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. SHATTUCK, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Powder-Distributors, of which the following is a specification.

This invention pertains to certain new and useful improvements in powder-distributors; and it comprises the detail construction, combination, and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawing the figure is a vertical sectional view of my improved powder-distributor.

In carrying out my invention I make the powder-receptacle *a* of two hemispherical heads 2 3, connected by a flexible strip or band 4, of leather or other suitable material, the ends of which are secured in any suitable manner to said heads. Within this flexible cylinder or band 4 is placed a coil or spiral spring 5, which presses on the heads and tends to force them apart. The upper head 2 is provided with an outlet opening or openings through which the powder is discharged by the contraction of the receptacle, said openings being covered with a layer *b* of finely-woven cloth and a sheet *c* of wire-cloth, said woven cloth preventing the too free discharge

of the powder and the escape of only the finest or most nebulous particles. When the heads are pressed together, the spring yields, and the air therein will be expelled through the cloth strainer and will carry with it such particles of the powder as are fine enough to pass through said strainer, said particles being thrown into the air and being so fine that they can be inhaled without injury to the lungs.

I claim as my invention—

As an improved article of manufacture, the powder-distributor herein described, consisting of the two hemispherical heads, one of which has an escape-opening formed therein, the layer *b* of woven cloth and sheet *c* of wire-cloth disposed over said opening, the flexible strip or band secured to the ends of said hemispherical heads, and the coil-spring also secured to said heads and bearing against said flexible strip or band, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 1st day of December, A. D. 1888.

CHAS. A. SHATTUCK.

Witnesses:

C. F. BROWN,
A. D. HARRISON.