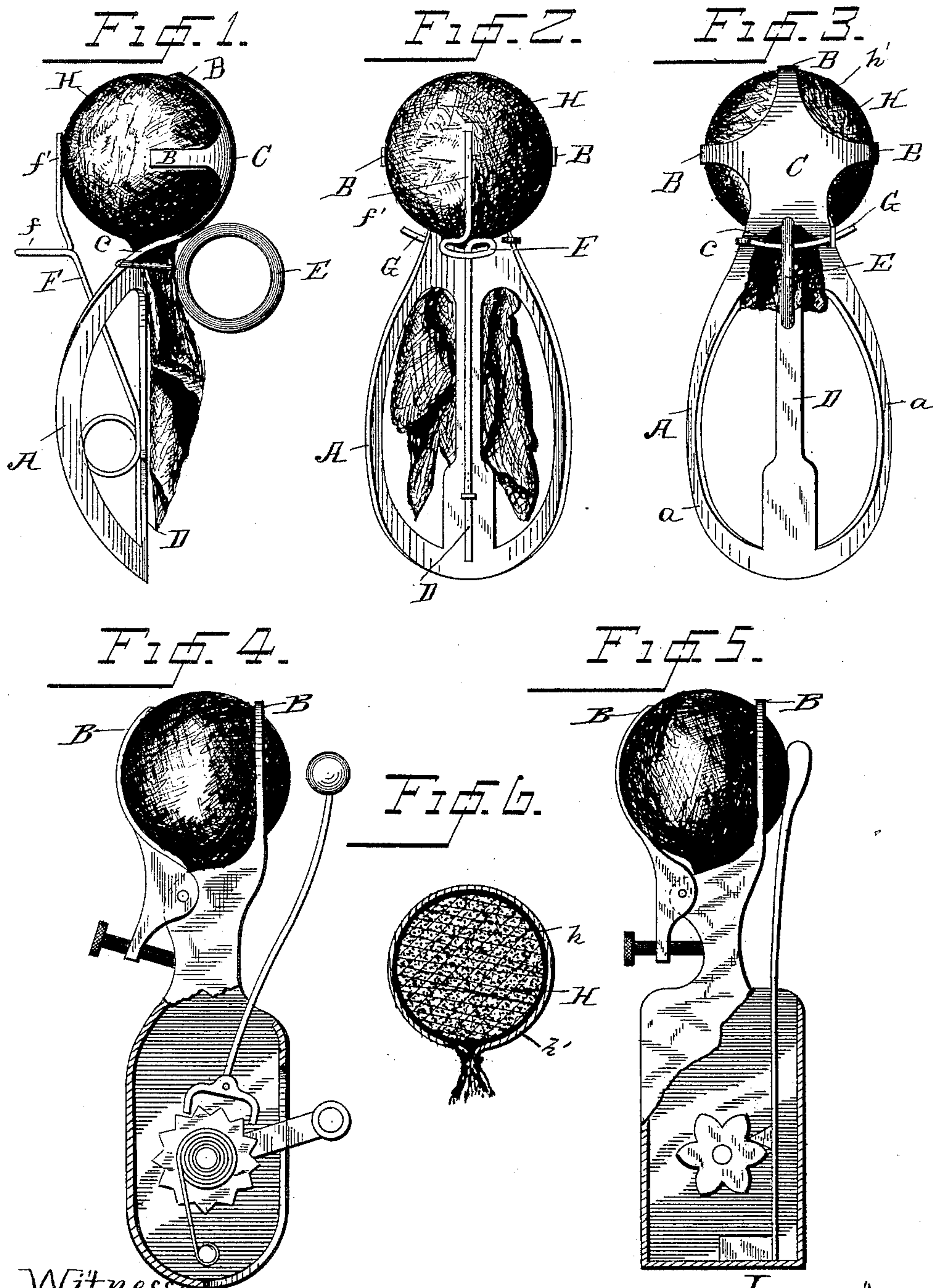


(No Model.)

A. J. SPINNER.
CARBOLIC SMOKE BALL HOLDER.

No. 394,029.

Patented Dec. 4, 1888.



Witnesses:
W. H. Jones,
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Inventor:
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per O. B. Querry,
Att'y.

UNITED STATES PATENT OFFICE.

ANDREW J. SPINNER, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR, BY
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CARBOLIC SMOKE-BALL HOLDER.

SPECIFICATION forming part of Letters Patent No. 394,029, dated December 4, 1888.

Application filed February 9, 1887. Serial No. 227,028. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. SPINNER, of San Francisco, in the county of San Francisco and State of California, have invented certain
5 new and useful Improvements in Carbolic Smoke-Balls and Apparatus Therefor; and I do hereby declare that the following is a full, clear, and exact description of the invention,
10 which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

15 My invention relates to improvements in receptacles or devices for holding and tapping antiseptic smoke balls or bags, the object being to impregnate the atmospheric air with an impalpable powder, permeated or charged
20 with an antiseptic, whereby said powder is inhaled with the atmospheric air.

It also consists in the manner of constructing or forming the antiseptic balls.

I attain these objects by the method and
25 mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side vertical perspective view of my invention, showing the ball or bag in position ready for use. Fig. 2 is a front view
30 of the same. Fig. 3 is a back or rear view. Figs. 4 and 5 are modifications showing means for operating the snappers, and Fig. 6 is a cross-section of the ball or bag.

Similar letters refer to similar parts throughout the several views.

35 In the drawings, A represents the frame or receptacle of my improved ball or bag holder, which is made, preferably, of light metal, and consists of the two oblong curved portions
40 *a a* and the vertical central portion, D, the frame or receptacle made out of one piece of metal, and terminating at the top in a solid outwardly-curved portion, C, having the inwardly-extending arms B B B, to form a cup
45 or receptacle for the reception of the smoke ball or bag H. To the lower and outside portion of the cup or receptacle C, I suitably secure a finger-ring, E, the purpose of which will be hereinafter more fully described.

50 In the lower portion of the frame, or about

the point where the solid portion C merges into the open portion *a a* and D, I form a perforation or hole, *c*, for the purpose of receiving the end of the cloth, forming the ball or bag H. To the upright portion D, I secure, 55 by any suitable means, a flexible wire spring or snapper, F, which can be made of flat steel or flexible metal; but I preferably employ flexible wire, as shown. By curving and bending the wire at a proper place I have a thumb-
60 piece, *f*, by which the snapper is operated.

To the end of the upright striking portion *f'*, I may, if desired, secure a button or cross-piece; but I prefer to use the simple wire, as shown, as by this means the wire seldom hits 65 the ball or bag in the same place twice, thus preventing the ball from becoming packed. Where the cloth passes through the hole *c*, I secure a hook or binding piece, G, on the outside of the frame A, for the purpose of more
70 firmly holding and binding the cloth of the ball H in position, and thus prevent the same from falling out of the cup when the wire or snapper F is being operated. It will thus be seen that by the above construction a ball
75 containing antiseptic remedies may be readily inserted, turned around, and securely held in the cup or be removed therefrom at will.

I will now proceed to describe my improved smoke-ball H. The ball I preferably form of 80 an inner covering of cheese-cloth or similar goods, cut round and tuckered, so that when the thread is drawn it forms a round ball, which of course is first filled with the medicine or remedial powders desired. It is then
85 drawn up tightly and sewed through and through, as clearly shown in Fig. 6, to prevent packing of the powders. I then place on the outside a fibrous cover, *h'*, which is cut square and drawn tightly over the first cover. 90 Both covers are then tied with silk floss, thread, or wire, the square corners and surplus goods forming the handle by which the ball or bag is secured in the frame.

It will be seen by the above that when the 95 ball is tapped it makes an indentation on the inner ball, but the outward covering comes into place again, thus leaving an air-space between the two coverings *h* and *h'*, which becomes partly filled with the powder. Then 100

when hit again this air-chamber is emptied by the concussion, which causes the powder to permeate the air, and the outer covering on resuming its position leaves the air-chamber again partly filled, as before, with the powder. Thus by this arrangement the powder is never wasted and only so much comes with each concussion.

The operation of my device is extremely simple. The ball or bag H is first placed in position. Then the forefinger is passed through the ring E, leaving the lower or open portion of the frame resting in the palm of the hand. The thumb is then placed upon the thumb-piece *f* and is snapped as rapidly as desired. This operation causes the end of the spring to strike or tap against the ball, thereby throwing off by concussive force the remedial powders and permeating the air around it with the fine particles of impalpable powder, which is then inhaled into the organs. The ball in operation is held a short distance from the mouth or nostrils and the powder is then inhaled.

In Fig. 4 I show a modification in which the smoke ball or bag is held loosely in a frame by means of an upright portion and a hinged curved portion provided with an adjustable thumb-screw, whereby the ball may be always held and set, as it is reduced in size, in its position. In the lower portion of the frame I secure a ratchet and coiled spring, the ratchet when in operation coming in contact with an "escapement," to which is secured or formed integral therewith a tapper or wire, to the end of which is secured a button or cross-piece, the ratchet-wheel being operated by a connecting-handle on the outside of the frame, or by a coiled spring which will automatically operate the tapper when wound up.

Fig. 5 is also a modification, the smoke ball or bag being held in position in a similar manner as that shown in Fig. 4. The flexible spring-snapper is provided with a projection

which engages with a ratchet-wheel, and which is operated by a connecting-handle on the outside of the frame.

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

1. A frame adapted to receive and hold a medicated package or puff-ball, and formed with a lower handle portion and with an upper cup-shaped or holding portion to receive and retain the package, in combination with a spring-actuated tapper or snapper mounted upon the frame and adapted to be snapped against the package, for the purpose set forth.

2. A frame for holding a medicated package, formed in one piece and comprising a lower curved handle portion and an upper cup-shaped portion to receive the package, in combination with a spring-tapper secured to the frame and adapted to be snapped against the package, for the purpose set forth.

3. A frame formed of one piece of metal having a lower handle portion and an outwardly-curved upper portion, in combination with a holding-ring and a snapper, substantially as set forth.

4. A frame comprising a cup-shaped holding portion and a lower handle portion, in combination with a medicated package or puff-ball, a pin or catch for securing the same in the cup-shaped holding portion, and a tapper consisting of a spring-wire secured to the handle portion and provided with a striking portion to be snapped against the package and bent within its length to form a thumb-piece, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ANDREW J. SPINNER.

Witnesses:

W. T. MANNING,
JOHN LOONY.