

(No Model.)

H. I. F. SCHULZE.
TOY PUZZLE.

No. 467,384.

Patented Jan. 19, 1892.

Fig. 1.

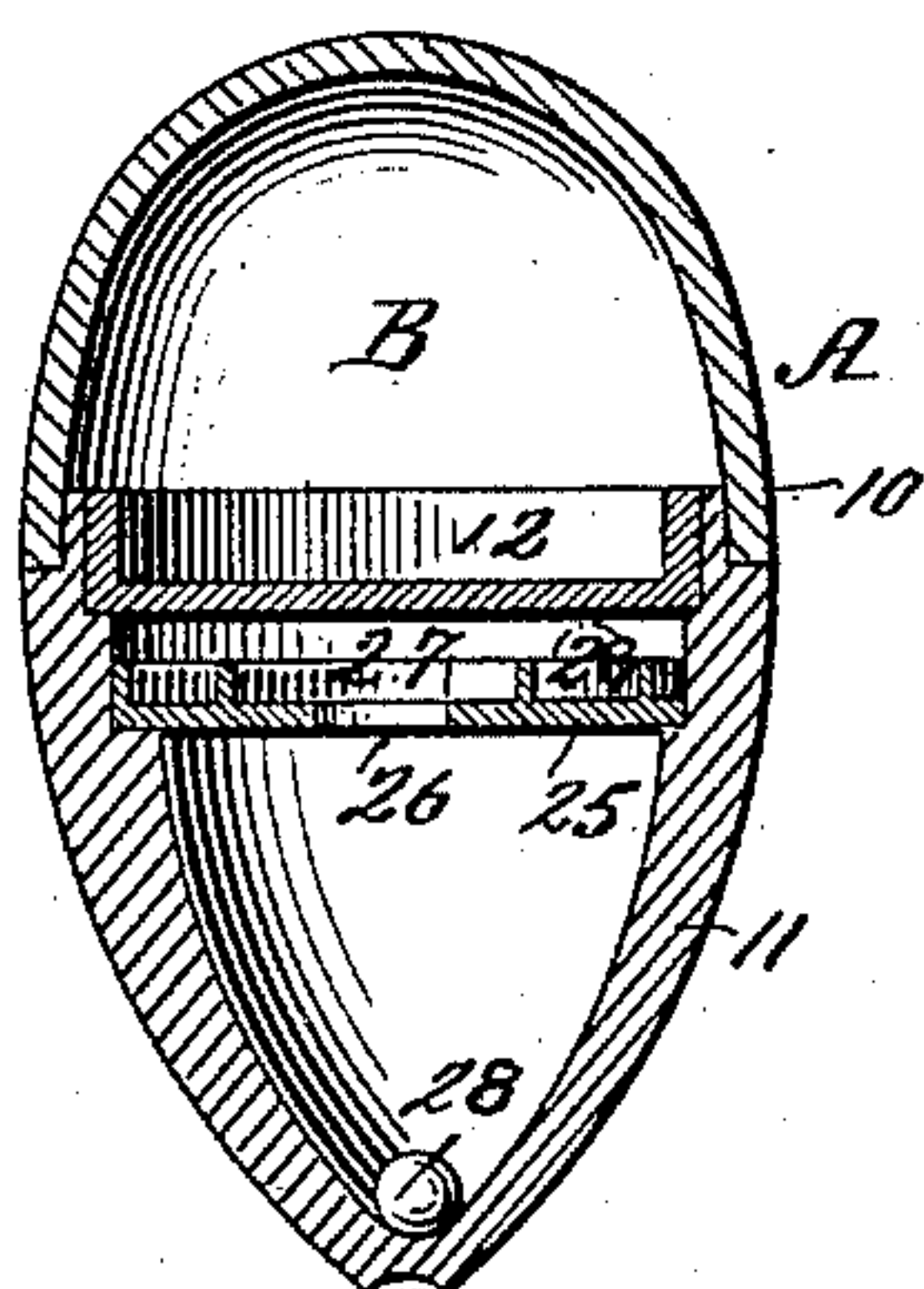


Fig. 4.

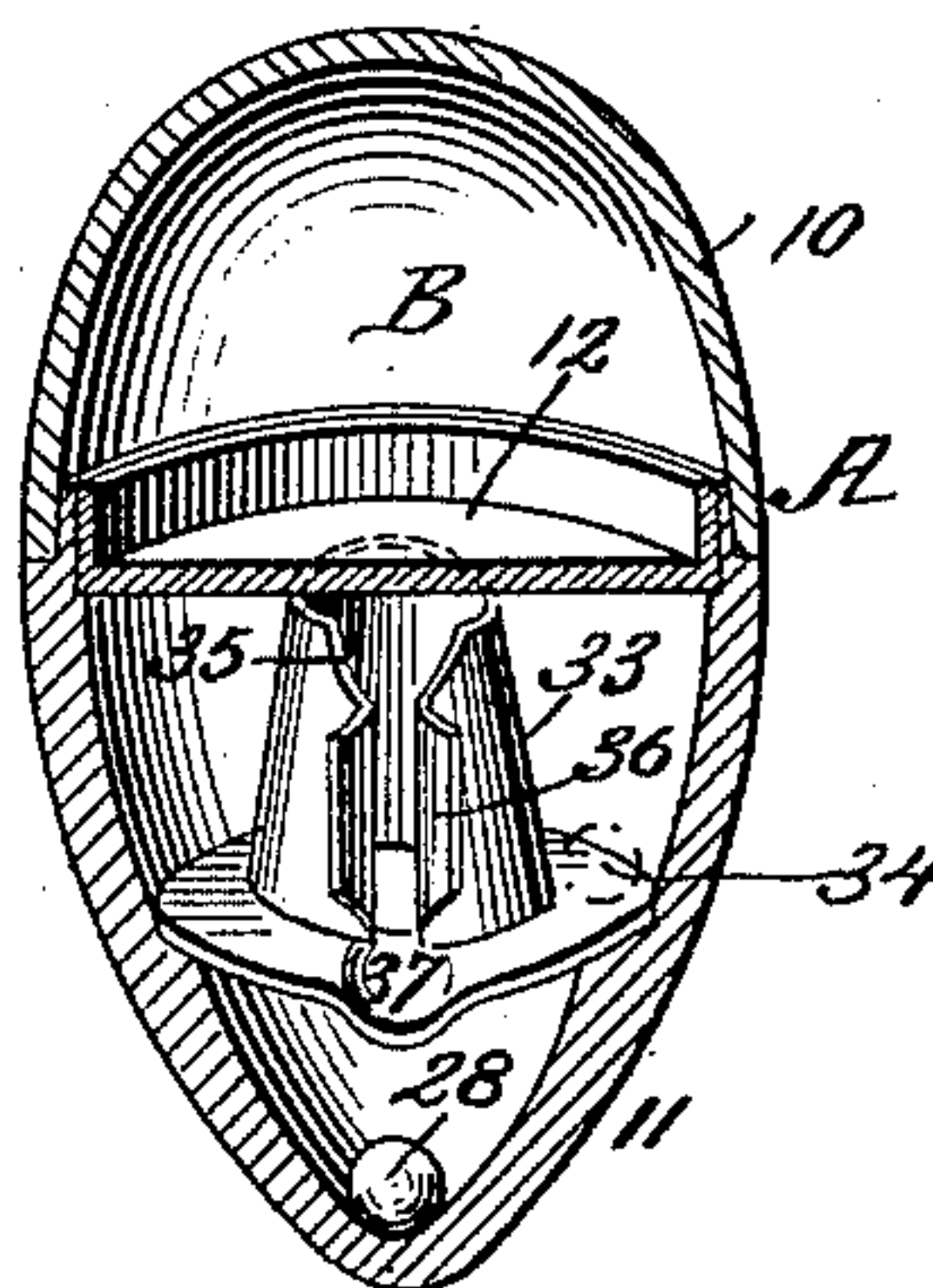


Fig. 2.

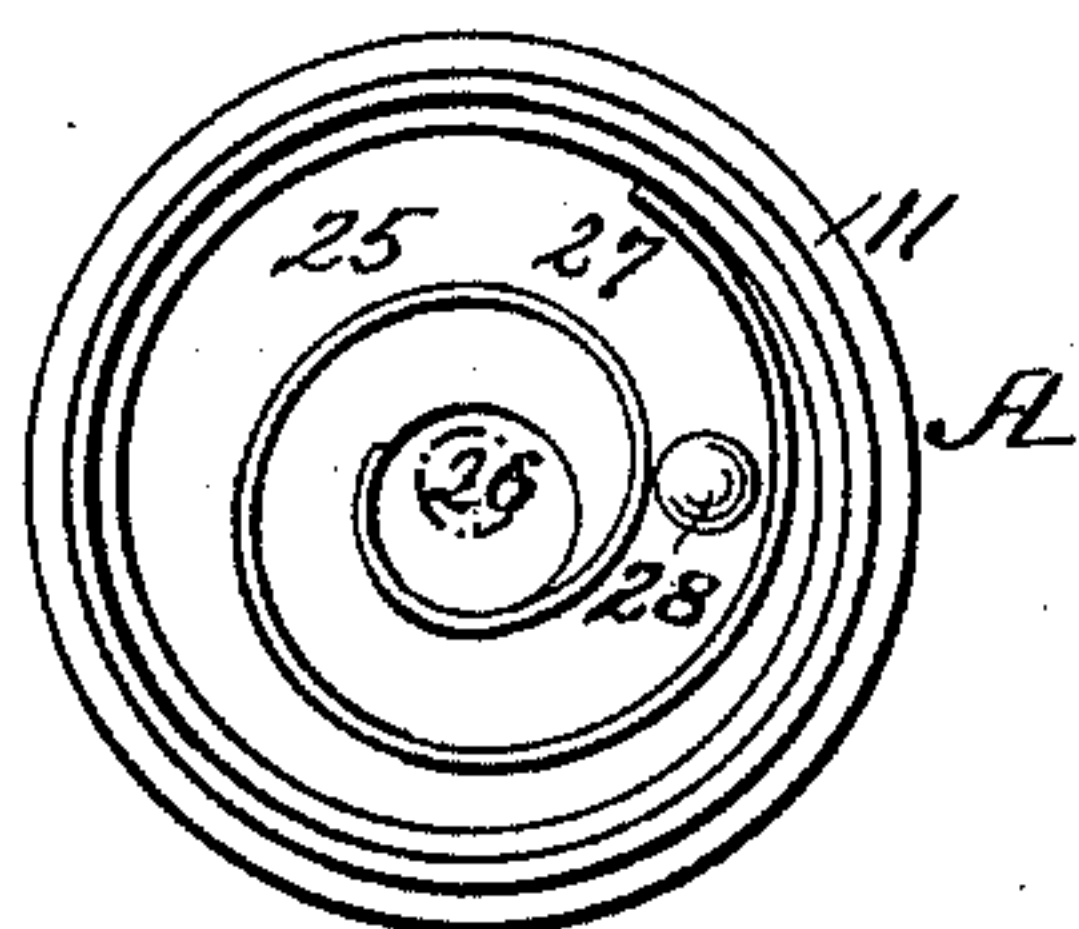
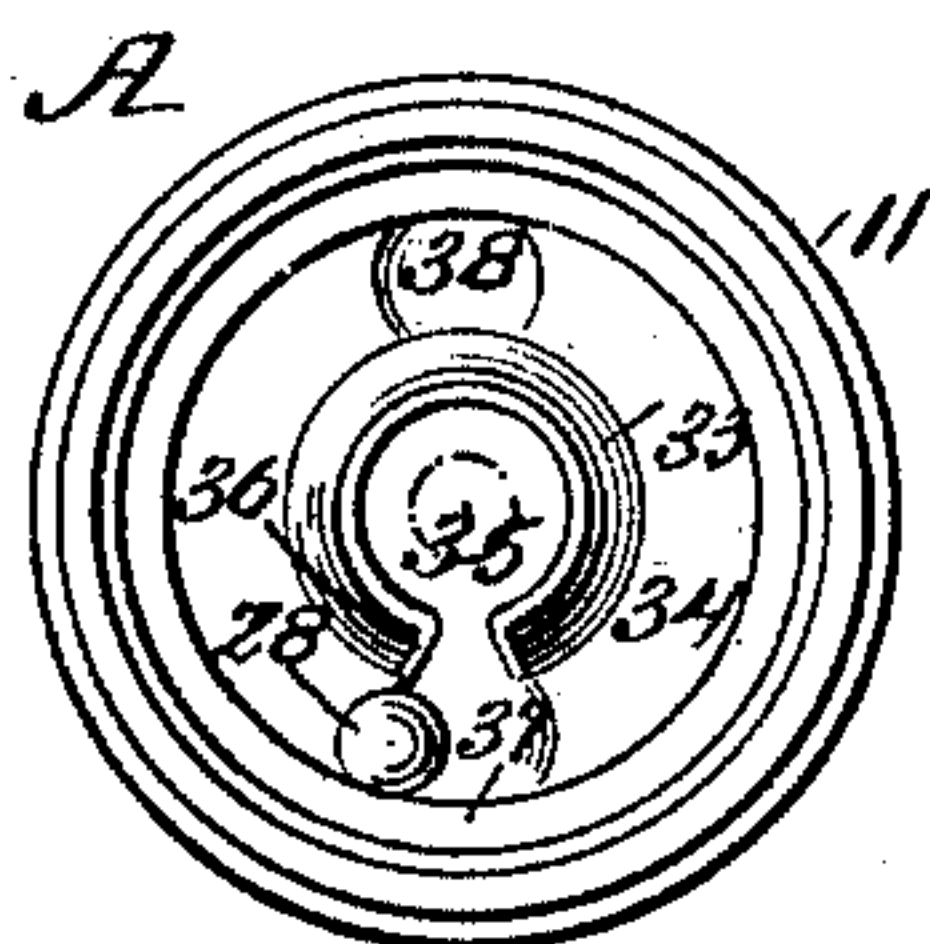


Fig. 5.



WITNESSES:

Paul J. Schot
W. Sedgwick

INVENTOR:

H. I. F. Schulze
BY *Munn & Co*
ATTORNEYS

UNITED STATES PATENT OFFICE.

HANS I. FERDINAND SCHULZE, OF NEW YORK, N. Y.

TOY PUZZLE.

SPECIFICATION forming part of Letters Patent No. 467,384, dated January 19, 1892.

Application filed May 9, 1891. Serial No. 392,201. (No model.)

To all whom it may concern:

Be it known that I, HANS I. FERDINAND SCHULZE, of New York city, in the county and State of New York, have invented a new and Improved Toy Puzzle, of which the following is a full, clear, and exact description.

My invention relates to improvements in toy puzzles; and it consists in the particular construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figures 1 and 2 are respectively a vertical section and a plan view of the toy, the top being removed in the latter view. Fig. 3 is a central vertical section through the body of the toy, illustrating a modification thereof. Fig. 4 is a central vertical section through another modification, and Fig. 5 is a plan view of the lower section of this modification with the top of the body removed.

The body A of the toy is made to simulate the shape of an egg and is provided with an interior chamber B. The body is preferably constructed in two sections 10 and 11, connected by a lap-joint, the upper section 10 being the top or body section and readily removed from the lower or pointed section 11. The chamber B within the egg is preferably divided into two compartments by a partition 12, the said partition being located in the upper portion of the lower or point section of the toy. The prime object of this invention is to so construct the body that by manipulating it properly it may be made to stand upon its point. One manner of accomplishing this result is shown in Figs. 1 and 2, in which in the lower point section 11 a second fixed partition 25 is horizontally located, provided with a central opening 26, and having produced upon its upper face a spiral rib 27, leading from the wall of the lower section to the opening 26 in the partition 25. A weight in the shape of a ball 28 is employed, and where the rib 27 connects with the body a mark is placed upon the exterior to enable one acquainted with the puzzle to tell at what

point the ball is to be started. The toy when properly manipulated with the point downward, the ball being upon the partition 25, will through said manipulation be enabled to stand alone by causing the ball to travel in the spiral channel formed by the rib 27 until it drops down through the opening in the partition 25 in the pointed end of the chamber B, as shown in Fig. 1. When this is accomplished and the egg-like body is placed point downward upon a suitable support, it will be balanced.

In Fig. 3 a horizontal platform 29 is placed in the lower section 11, the said platform being provided with an opening surrounded by an upwardly-extending sleeve 30. The said sleeve is preferably located adjacent to one side wall of the chamber B, and its inner side is made slanting and provided with a channel 31, forming a track which leads from the partition or platform 29 upward to an opening 32 in the top of the sleeve. The ball being upon the partition or platform 29, the object is to so manipulate the egg-like body as to cause the ball-weight 28 to slide up the sleeve and enter the opening 32 at the top, whereupon the weight will drop down through the inclosed opening in the platform or partition to the point of the egg, as described in connection with Figs. 1 and 2.

In the modified form of the device illustrated in Figs. 4 and 5 the construction is somewhat similar to that shown in Fig. 3. A conical sleeve 33 is provided with a flange 34, extending horizontally from its base, which flange engages with the walls of the chamber in the lower section 11 of the egg-like body and practically forms a partition. The upper portion of the conical sleeve 33 is but a short distance below the removable partition 12, and in its upper end at one side an opening 35 is formed, and a track 36, formed by flanging the sides of the conical sleeve, leads upward from the base-flange 34 to the opening at the top of the sleeve. Immediately in front of the track of the sleeve a depression 37 is preferably produced in the flange 34 and the location of said depression is indicated by a mark upon the outer face of the body. When the ball 28, which is also employed as a weight in this form of the device, is made to rest in

the socket 37, by properly manipulating the body of the toy the ball may be made to slide upward into the upper opening 35 of the sleeve and down through the sleeve to the point of the egg-like body, balancing the same. As a baffle, however, a second depression 38 is made in the base-flange of the sleeve directly opposite or practically opposite the guide-depression 37, as illustrated in Fig. 5. That portion of the chamber B contained in the top may be utilized, if desired, as a receptacle for various articles, and pictures of any description may be placed in the removable partition 12, which partition is preferably made in the form of a tray.

The toy is adapted to exemplify as nearly as possible the problem solved by Columbus—namely, that of standing an egg on end.

I have illustrated in a majority of the views in the drawings a slightly flattened or concaved surface at the point of the egg upon which it is to stand. While such a construction is not absolutely necessary, it is preferred, as when a balance is found the egg stands more steadily.

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

1. A toy consisting of an egg-like hollow body provided with a horizontal partition, a conical sleeve extending upward from the partition and having a track leading from the partition to the top of the sleeve, and a ball in the hollow body, substantially as herein shown and described.

2. A toy consisting of an egg-like hollow body formed in two sections having its chamber divided into two compartments by a horizontal partition and provided with a second horizontal partition in the lower chamber, said second partition being apertured, and a movable weight in the hollow body, substantially as described.

3. A toy consisting of an egg-like hollow body provided with a horizontal partition having a depression in one side, and a conical sleeve extending upward from the partition, having a track on one side opposite the depression of the partition, said track being formed by flanging the sides of the sleeve, and a ball in said hollow body, substantially as described.

HANS I. FERDINAND SCHULZE.

Witnesses:

J. FRED. ACKER,
C. SEDGWICK.