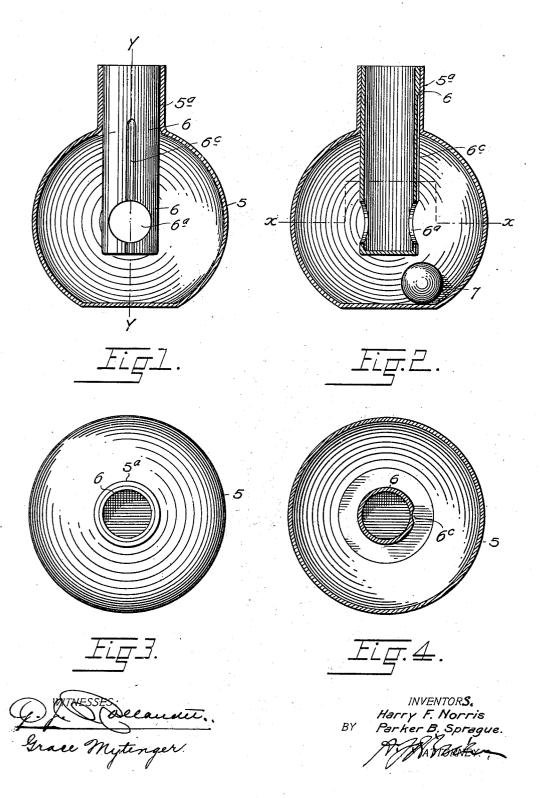
H. F. NORRIS & P. B. SPRAGUE. PUZZLE.

(No Model.)

(Application filed Dec. 26, 1899.)



UNITED STATES PATENT OFFICE.

HARRY F. NORRIS AND PARKER B. SPRAGUE, OF DENVER, COLORADO.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 666,022, dated January 15, 1901.

Application filed December 26, 1899. Serial No. 741,510. (No model.)

To all whom it may concern:

Be it known that we, HARRY F. NORRIS and PARKER B. SPRAGUE, citizens of the United States of America, residing at Denver, in the 5 county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Puzzles; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others 10 skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in puzzles; and it consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illus-

20 trated an embodiment thereof.

In the drawings, Figure 1 is a vertical section taken through the bulb portion of the device, showing the tube in elevation. Fig. 2 is a section taken on the line Y Y, Fig. 1. 25 Fig. 3 is a top view of the device. a section taken on the broken line X X, Fig. 2.

Similar reference characters indicating corresponding parts in the views, let the numeral 5 designate a bulb composed of some 30 transparent material, preferably glass. This bulb is provided with a neck 5a, in which is inserted a tube 6, also preferably composed of glass and attached to the neck of the bulb by heating the parts sufficiently to blend 35 them together, whereby a substantially integral device is formed. The outer extremity of the tube, as well as the neck of the bulb, is open, while the inner extremity of the tube directly in line with the open outer extrem-40 ity is closed. The tube projects into the bulb beyond the neck of the latter and is provided near its inner extremity with two openings 6^a, located diametrically opposite each other. The tube 6 is preferably cylin-45 drical in shape. On one side thereof is formed

a small external groove 6°, leading from the neck of the bulb inwardly to one of the holes 6° of the tube. A small ball 7 is dropped into the bulb through the tube, entering by way of an orifice 6a, both of the orifices 6a 50 being large enough to allow it to pass. bulb is preferably spherical or oval in shape, and its body portion is much larger than the tube, so that the space between the inner wall of the bulb and the floating portion of the 55 tube containing the orifices will be considerable.

The solution of the puzzle consists in getting the ball out of the bulb by way of the tube. This can be done by inverting the bulb 60 and getting the ball in line with the groove 6° of the tube, then tilting the device sufficiently to cause the ball to travel down the groove to an opening 63, and finally by returning the device to the inverted vertical 65 position before the ball has time to drop through the opposite opening 6a.

The operation will be found fascinating, amusing, and good practice for the nerves, since the device must be held with a steady 70 hand until the ball begins to run in the groove toward the orifice and then shifted to the vertical position with great celerity in order

to accomplish the desired end.

Having thus described our invention, what 75 we claim is-

As an improved article of manufacture the device herein described composed of a bulb and a tube protruding thereinto and provided with oppositely-located orifices, the inner ex- 80 tremity of the tube being closed and the outer extremity open.

In testimony whereof we affix our signatures in presence of two witnesses.

> HARRY F. NORRIS. PARKER B. SPRAGUE.

Witnesses: GRACE MYTINGER, A. J. O'BRIEN,