

No. 714,421.

G. O. WILLEY.  
PUZZLE.

Patented Nov. 25, 1902.

(Application filed Nov. 22, 1901.)

(No Model.)

Fig. 1.

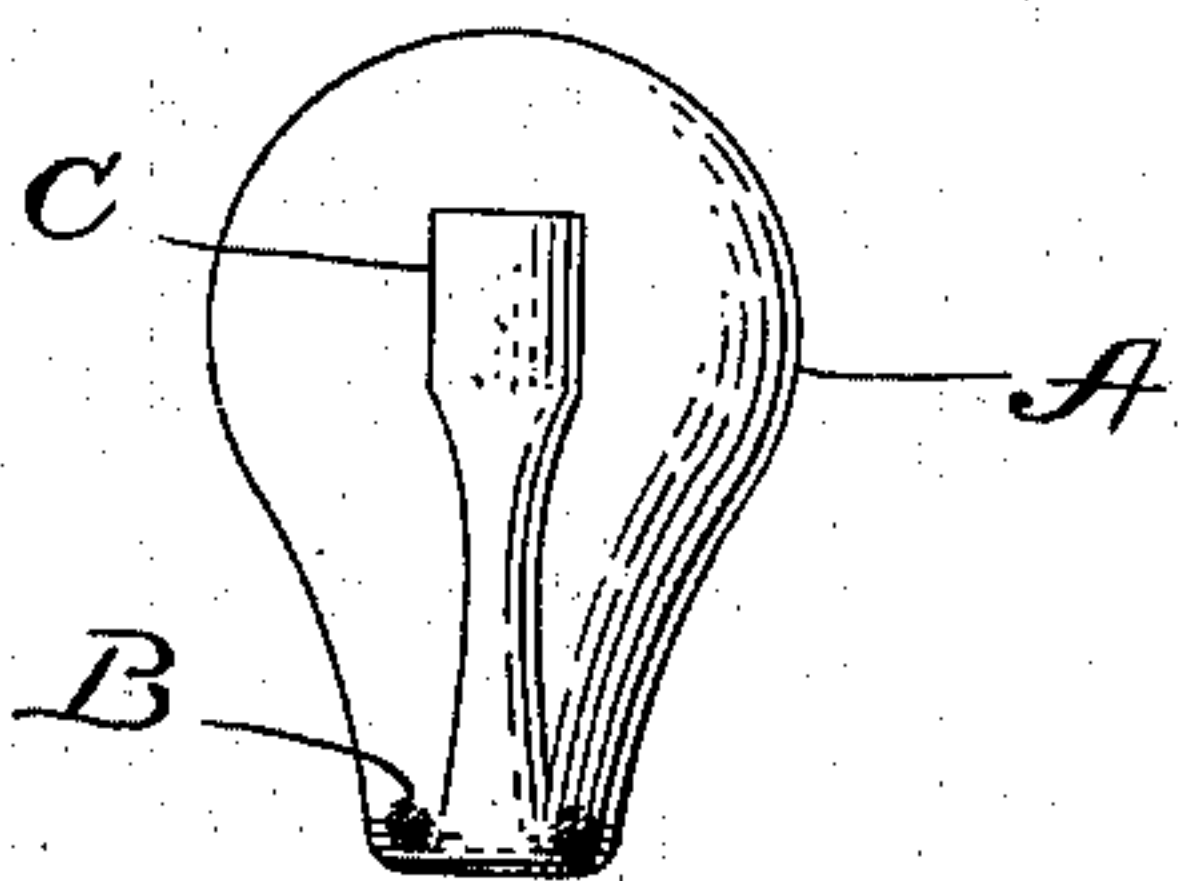
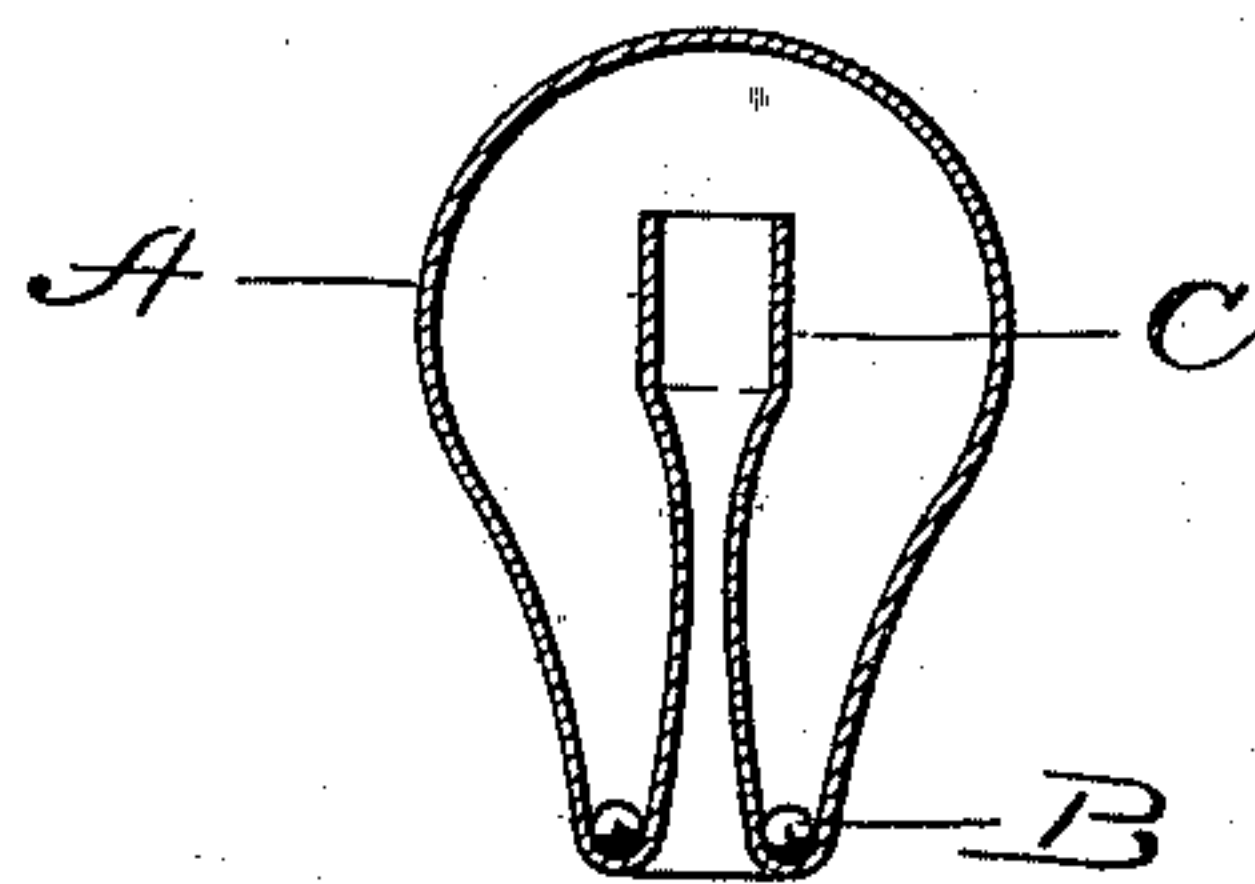


Fig. 2.



Witnesses:

Wm. S. Dodge

H. Joseph Doyle

Inventor:

George O. Willey

by Wright, Brown & Quinby  
Attys.



# UNITED STATES PATENT OFFICE.

GEORGE O. WILLEY, OF LYNN, MASSACHUSETTS.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 714,421, dated November 25, 1902.

Application filed November 22, 1901. Serial No. 83,342. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE O. WILLEY, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new  
5 and useful Improvements in Puzzles, of which the following is a specification.

This invention has for its object to provide a puzzle of the class in which a cup or socket is employed and a ball or similar object  
10 adapted to rest in the cup, the object of the puzzle being to so manipulate the apparatus as to lodge the ball in the cup and the construction being purposely such that some difficulty is experienced in the operation.

15 The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents  
20 a view of a device embodying the puzzle in elevation, and Fig. 2 represents a vertical sectional view of the same.

The same reference characters indicate the same parts in both the figures.

25 My invention is embodied in a device comprising a cup C, which, as here shown, is of elongated form and approximately tubular, having an open mouth at its upper end, which is somewhat enlarged, and secured at its lower  
30 end to the base of the device. The tubular cup is inclosed within a casing A, which is shown as being transparent and is of such form as to allow considerable room for the passage of one or more balls B, which are  
35 also inclosed within the casing and which are free to pass to all parts of the inclosed space.

40 The object of the puzzle is to induce the balls by tipping, shaking, inverting, or otherwise manipulating the device to lodge within the cup.

The lower portion of the cup is closed or contracted to prevent the escape of the balls through the base, so that in case one ball is  
45 caused to lodge in the cup, the other remaining outside the cup, the operator is confronted with the problem of so manipulating the de-

vice as to avoid dislodging the lodged ball, while inducing the other ball to lodge in the cup.

The casing A, as here shown, is pear-shaped, with the broader portion at the upper part of the casing and the lower part narrowed, so that at the base or point of connection of the casing and cup there is sufficient room to  
55 contain the balls, but not to allow much movement thereof, excepting in a lateral direction, while at the broader upper part of the casing the balls may move freely in all directions.

The cup and casing are preferably both  
60 made of glass and may be blown or otherwise formed integral with each other.

I claim—

1. A puzzle comprising a transparent casing, a cup within the casing and fixed to its  
65 base, a contracted annular space being formed between the base of the cup and the casing, the cup having an open mouth at its upper end, and a plurality of balls movable freely within the casing and adapted to lodge in the  
70 cup, the said cup being closed or contracted at its lower portion to prevent the escape of the balls through the base, whereby the balls are obliged to enter and leave the cup through its mouth.

2. A puzzle comprising a transparent casing, a cup within the casing and fixed to its  
75 base, a contracted annular space being formed between the base of the cup and the casing, the cup having an open mouth at its upper  
80 end, and a plurality of balls movable freely within the casing and adapted to lodge in the cup, the parts being so arranged that the balls, in order to enter the cup, must pass  
85 directly from a relatively distant part to the mouth of the cup, without the aid of an intermediate guiding-surface.

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

GEORGE O. WILLEY.

Witnesses:

A. D. HARRISON,  
GEORGE PEZZETTI.