

(No Model.)

W. M. WILLIAMS.
PUZZLE.

No. 580,072.

Patented Apr. 6, 1897.

FIG. 1.

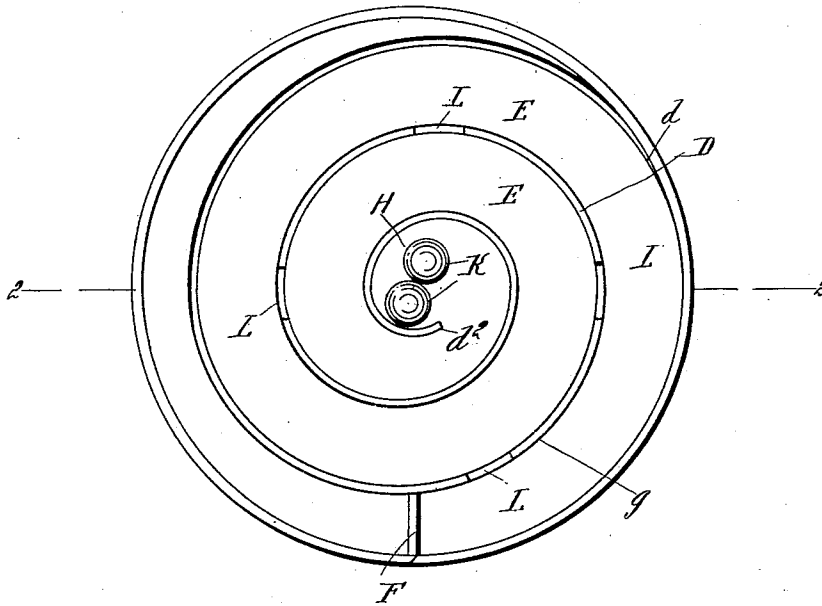
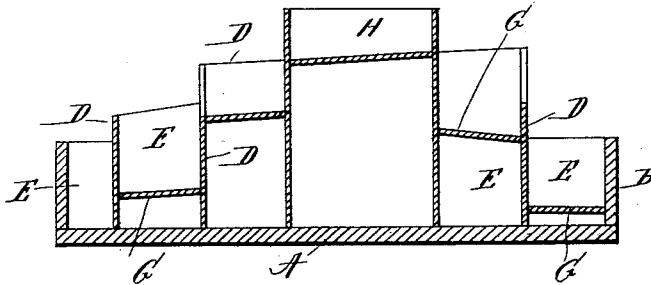


FIG. 2.



WITNESSES:

John Buckler,
C. Gerst.

INVENTOR

Will M. Williams,
BY
Edgar Tate & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILL MAYNARD WILLIAMS, OF DE GRAFF, OHIO.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 580,072, dated April 6, 1897.

Application filed March 20, 1896. Serial No. 584,020. (No model.)

To all whom it may concern:

Be it known that I, WILL MAYNARD WILLIAMS, a citizen of the United States, and a resident of De Graff, in the county of Logan and State of Ohio, have invented certain new and useful Improvements in Puzzles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to puzzles; and the object thereof is to provide an improved device of this class which is simple in construction, and the solution of which, though difficult, may be accomplished by the exercise of care, skill, and ingenuity in the manipulation thereof.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a plan view of my improved puzzle, and Fig. 2 a section thereof on the line 2 2 of Fig. 1.

In the practice of my invention I provide a plate or board A, which is preferably circular in form and which constitutes the bottom of the puzzle, and secured thereto is an annular rim B, and placed within said annular rim is a spiral D, one end of which is secured at *d* and the other end of which terminates in the center or near the center, as shown at *d*², and said spiral also increases gradually in height from the outer end *d* to the inner end *d*², and by means of this spiral D, which consists of a thin piece of sheet metal, cardboard, or any desired material, a spiral chamber E is formed, and the spiral chamber E is provided with a spiral bottom G, which begins, preferably, at *g* and which is carried upwardly in the form of a spiral, and which constitutes also the bottom of a central circular chamber H, and arranged in the spiral chamber E, near the point where the bottom G starts, is a transverse plate or partition F. I also employ two balls or spherical bodies K, and formed in the walls of the spiral chamber E at predetermined points are openings L, and it will also be observed that the spiral bottom G of the spiral chamber E is slightly outwardly and downwardly inclined, as shown in Fig. 2, and the solution of the puzzle con-

sists of rolling the balls or bodies K up the inclined spiral bottom G into the central chamber H. This solution is exceedingly difficult because of the outward and downward incline of the spiral bottom, and also of the openings L in the walls of the spiral chamber, the tendency of the balls being to roll out through said openings. The solution, however, may be accomplished by the exercise of care, skill, and ingenuity in the manipulation of the device, and said solution or effort thereat is both interesting and entertaining.

My invention is not limited to the material of which the same is composed, and in the construction thereof I may employ a solid block of wood, in which may be formed the spiral chamber, the spiral bottom of which would be of the form hereinbefore described, and other changes in and modifications of the device herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

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

A puzzle comprising a circular bottom plate or board which is provided with a circular rim or wall, within which is placed a spiral, one end of which is secured to the said circular rim, and the other end of which terminates at or near the center, and which gradually rises from the outer to the inner end, and whereby a spiral chamber is formed, said chamber being provided with a spiral bottom, which begins at the surface of the bottom plate or board, and which gradually rises to the top or center, where an open chamber is formed, said spiral bottom being inclined outwardly and downwardly, and the spiral wall by which the spiral chamber is formed, being provided with openings or passages, at a level with said bottom, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 17th day of March, 1896.

WILL MAYNARD WILLIAMS.

Witnesses:

NATHAN LEE STRAYER,

JOSEPH RICHARD WELLER.