No. 639,868. Patented Dec. 26, 1899.

F. R. SKINNER.

PUZZLE.

(Application filed June 13, 1899.)

(No Model.)

FIG. 1.

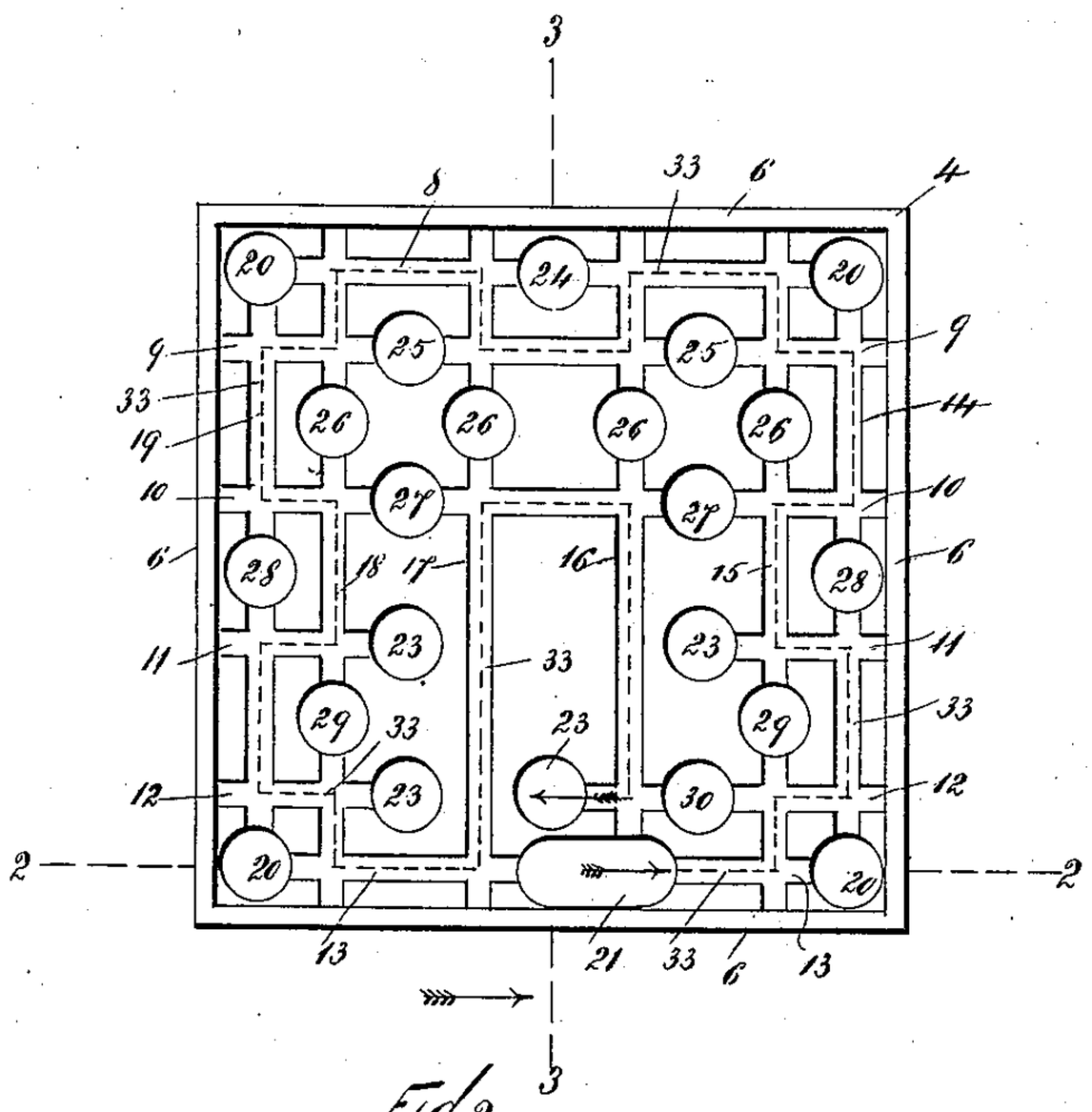


FIG. 2.

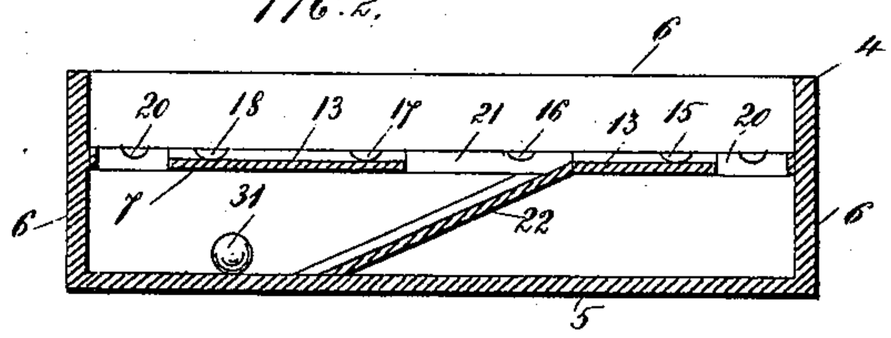
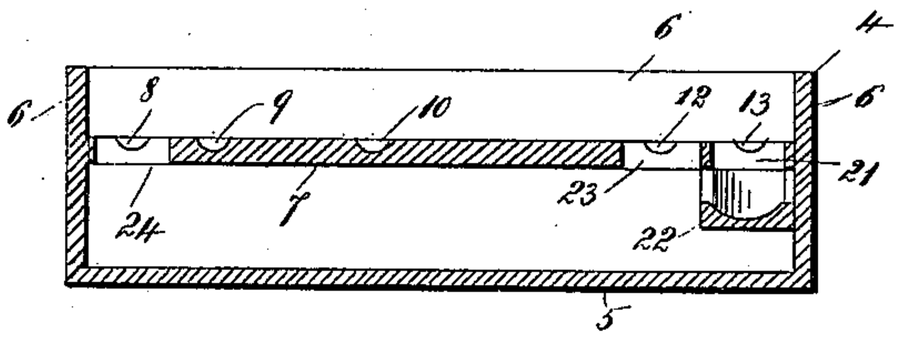


FIG. 3.



WITNESSES

John Buckler,
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UNITED STATES PATENT OFFICE.

FRED RICHARD SKINNER, OF SYRACUSE, NEW YORK.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 639,868, dated December 26, 1899.

Application filed June 13, 1899. Serial No. 720,349. (No model.)

To all whom it may concern:

Be it known that I, FRED RICHARD SKINNER, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Puzzles, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to puzzle and game devices; and the object thereof is to provide an improved puzzle which is simple in construction, but the solution of which is exceedingly difficult, said solution being capable of accomplishment, however, by the exercise of care, skill, and ingenuity in the manipulation of the device.

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; Fig. 2, a transverse section on the line 2 2, and Fig. 3 a section on the line 3 3 of Fig. 1.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in the practice of my invention I provide a box or casing 4, which is rectangular in form and which comprises a bottom 5 and vertical side and end walls 6, and said box or casing is preferably substantially square.

Arranged within the box or casing 4 and preferably substantially half-way between the top and bottom thereof is a transverse partition 7, provided with transverse grooves 8, 9, 10, 11, 12, and 13, which are crossed at right angles by similar grooves 14, 15, 16, 17, 18, and 19, and it will be seen that the grooves 11 and 12 are interrupted or do not extend continuously across the partition.

At each corner of the box or casing the partition 7 is provided with holes or openings 20, with which the grooves 8 and 13 and 14 and 19 communicate, and the said groove 13 is provided centrally thereof with an oblong opening 21, beneath which is placed an inclined plate 22, constituting a slide or way which extends from the bottom of the box or casing upwardly to one end of the oblong opening 21.

Openings in the partition 7, similar to the openings 20 in the corners thereof, are also formed at various points in said partition and in the said grooves, said openings being shown at 23, where the inner ends of the separate sections of the grooves 11 and 12 terminate, and also at the center of the groove 8, as shown at 24, at each side of the center of the groove 9, as shown at 25, and in each of the grooves 15, 16, 17, and 19 and between the grooves 9 and 10, as shown at 26, and at each side of the center of the groove 10, as shown at 27, and centrally of the grooves 14 and 19, as shown at 28, and in the grooves 15 and 18, between the grooves 11 and 12, as shown at 29, a similar opening being formed in the right-hand section of the groove 12 at 30. A ball or spherical body 31 is also provided, and said ball or body is capable of passing through any of the circular openings hereinbefore described and also through the oblong opening 21, and in practice this ball or body is placed in the bottom of the box or casing, and the solution of the puzzle consists in so manipulating the box or casing as to roll said ball or body up the incline 22 in the direction of the arrow shown in Fig. 1 and then through the various grooves indicated by the dotted line 33 until it reaches the circular opening 23, through which it passes into the bottom of the box or casing. This solution is very difficult, the tendency of the ball being to roll through the various circular openings before it reaches the opening 23, said openings being formed in the various grooves along which it passes; but by care and skill in the manipulation of the box or casing the ball may be made to follow the dotted line 33, and the effort to accomplish this solution is exceedingly interesting and such operation very difficult.

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

A puzzle, comprising a box or casing composed of a bottom and vertical side and end walls, said box or casing being provided with a horizontal partition provided in its upper surface with a plurality of intersecting grooves

in which are formed openings through said partition, an inclined plate disposed below said partition and below one of said openings, and a ball or other body which is of a predetermined size whereby it fits said grooves and moves therein under gravital actuation and may pass through said openings, the relative arrangement of said grooves and openings being such that said ball or other body may traverse said partition from the opening below which is located said inclined plate, by means of said grooves to a final opening without obstruction or interference by any other of said openings, 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 9th day of June, 1899.

FRED RICHARD SKINNER.

Witnesses:
JOHN ALEXANDER MOLLOY,
DANIEL STRACLUE.