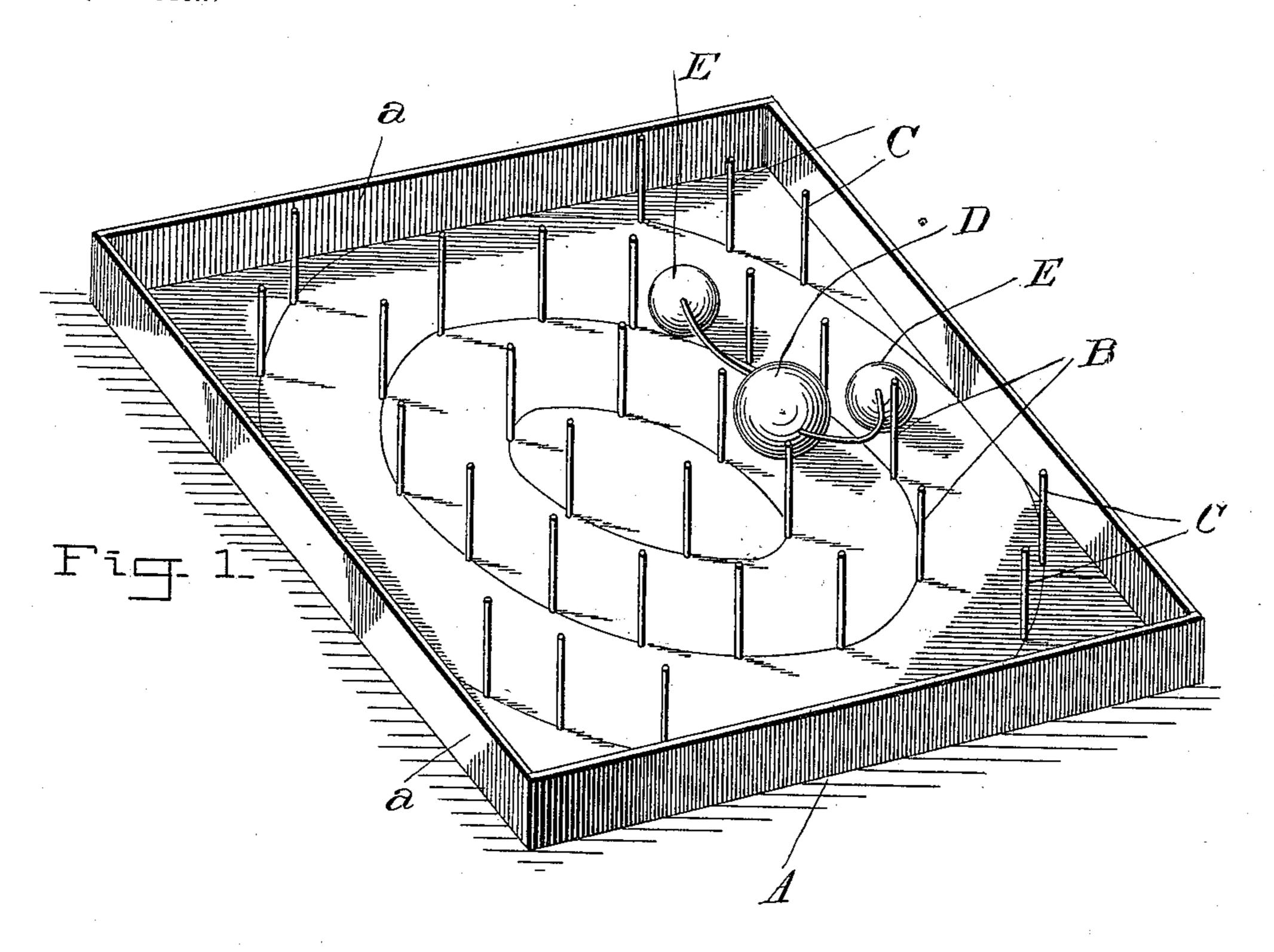
No. 607,735.

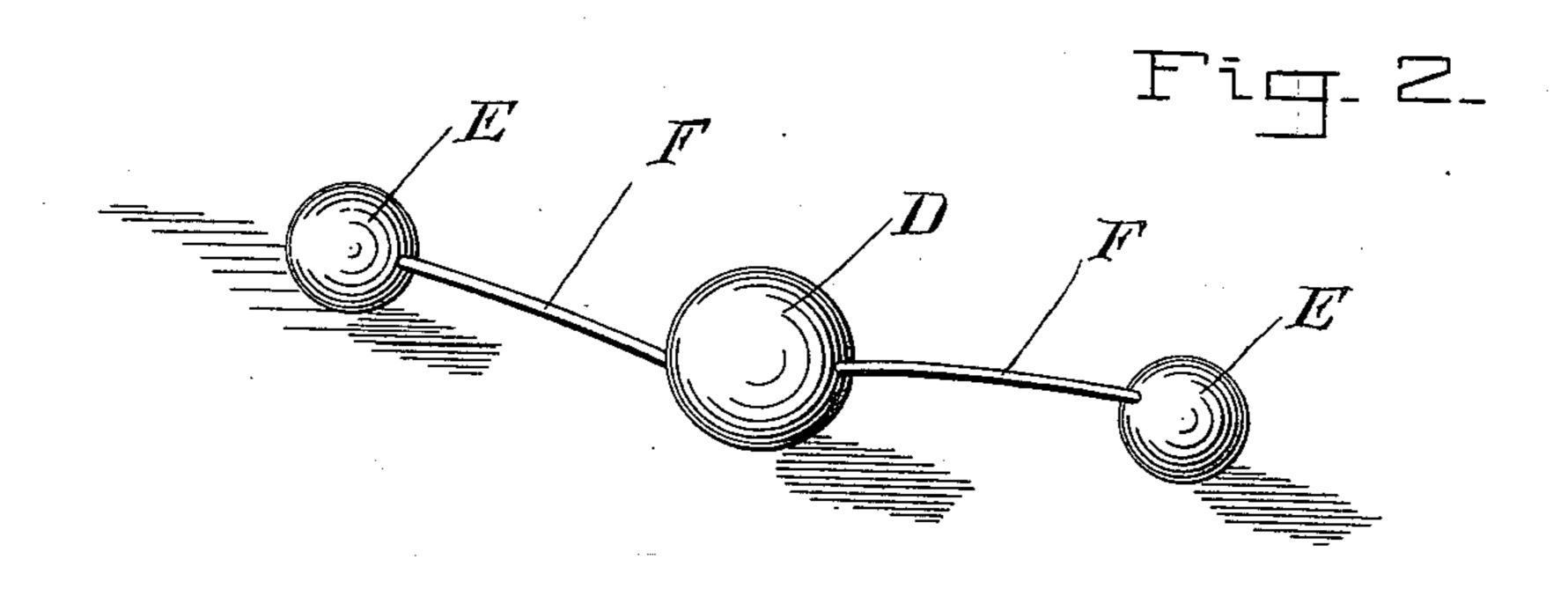
Patented July 19, 1898.

## N. B. CRARY. PUZZLE.

(Application filed Sept. 24, 1897.)

(No Model.)





Witnesses Chas. P. Heinemann. Wietn J. Evans Inventor Ned B. Crary. By John Wedderburn.

Attorney

## United States Patent Office.

NED BUSSELL CRARY, OF CANISTEO, NEW YORK.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 607,735, dated July 19, 1898.

Application filed September 24, 1897. Serial No. 652,883. (No model.)

To all whom it may concern:

Be it known that I, NED BUSSELL CRARY, a citizen of the United States, residing at Canisteo, in the county of Steuben and State of 5 New York, have invented certain new and useful Improvements in Puzzles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which

to it appertains to make and use the same. This invention relates to certain new and useful improvements in puzzles of that class in which is provided a board or base and a plurality of pins or projections supported or 15 fixed thereon and a series of movable objects which are designed to be so moved by manipulation of the box as to cause them to be moved from one position over a fixed course to a predetermined point. The novelty in 20 the present instance resides in having these movable objects connected by a ligament, which by preference is flexible, so that the objects while moving in unison are with difficulty caused to traverse the desired path, 25 the object of the flexible ligament or ligaments being to add to the difficulty in moving the objects from place to place, for as one is moved in one direction one of the others is quite certain to want to move in another 30 direction at the same time. The pins are so spaced that the larger of the movable objects cannot pass between each two, but only between a certain two in each row or circle of the pins or projections, although the small 35 balls or objects may be passed through between any of said pins or projections. The

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be brought out in the appended claims.

ing to get them all home before daylight.

balls or objects represent three clubmen on

their way home at three a. m., the object be-

The invention is clearly illustrated in the 45 accompanying drawings, which, with the letof this specification, and in which—

Figure 1 is a perspective view of my improved puzzle, and Fig. 2 is a perspective view 50 of the movable objects and their ligaments.

Like letters of reference indicate like parts in both views.

Referring now to the details of the drawings by letter, A designates a suitable base or board provided with a surrounding flange 55 a, which serves to keep the objects within the boundary of the board or base, as will be readily understood.

B are series of pins or projections vertically disposed with relation to said base or board, 60 and while these may be arranged in any desired manner I have in this instance shown them as in circles concentric with each other. These pins in the inner circles are disposed at substantially equal distances apart; but 65 in each row of circles there is one opening of greater width than the other, so that the larger of the connected objects may be passed therethrough, the other openings or passages being of less width than the diameter of the large 70 ball or object. The enlarged opening in the one circle is arranged otherwise than coincident with that of the other, preferably at diametrically opposite sides, to render the same difficult to the accomplishment of the desired 75 end. At each corner of the box I arrange two or more pins or projections C, disposed as shown, the spaces between these projections being such as to prevent the passage therethrough of the larger ball.

D and E E are the balls or objects, one, preferably the center one, being of greater diameter than the others, the said large one being of such diameter as not to pass through the openings between any two of the pins, 85 except the large openings just described, and the small balls or objects being of such diameter as to readily pass through any of the spaces between the pins. These balls or objects are connected by the ligaments F, which 90 are by preference flexible, and, if desired, may be elastic, and these ligaments may be of any desired length.

The enlarged spaces or openings between the pins may be designated upon the base or 95 board in any suitable manner.

In practice balls connected by the ligaters of reference marked thereon, form a part | ments are placed in position at the startingpoint or corner of the box, and then the object of the game is to so manipulate the box 100 as to cause all of the objects to be passed from this point through the proper channels within the central inclosure. This while at first appearing to be an easy matter will upon

trial be found to be quite difficult. This puzzle will furnish amusement to the old as well as the young.

The different objects may be differently colored, if desired, although this is not at all necessary to the accomplishment of the purpose for which it is designed.

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

ro Patent, is-

1. A puzzle comprising a base, vertically-disposed projections thereon, spaced as described, and a series of balls, connected by flexible ligaments, and adapted to pass between certain of such projections and not between others, substantially as shown and described.

2. A puzzle, comprising the base, vertically-disposed projections thereon, and three movable objects or balls which are connected by flexible ligaments, one of the series being of greater diameter than the other two, and the spaces between the said projections being of different widths, as shown and described.

25 3. The puzzle, comprising the base, vertically-disposed pins thereon, which are arranged in concentric circles and spaced equi-

distantly, save at one point in the respective circles, a series of movable balls connected by flexible ligaments, one of such balls being 30 of greater width than the spaces between the projections save at the point above specified, and the other ball or balls being of less width than any of the spaces between the pins, as shown and described.

4. A puzzle comprising a base, vertically-disposed projections thereon spaced as described, and a series of movable objects connected by ligaments, said objects being of different diameters, substantially as described. 40

5. A puzzle comprising a base, vertically-disposed projections thereon spaced as described, and a series of movable objects connected by ligaments, said objects being of different diameters, and the spaces between 45 the projections being also of different widths, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

NED BUSSELL CRARY.

 $\operatorname{witnesses}$  :

DENISON CRARY, C. B. JOHNSON.