

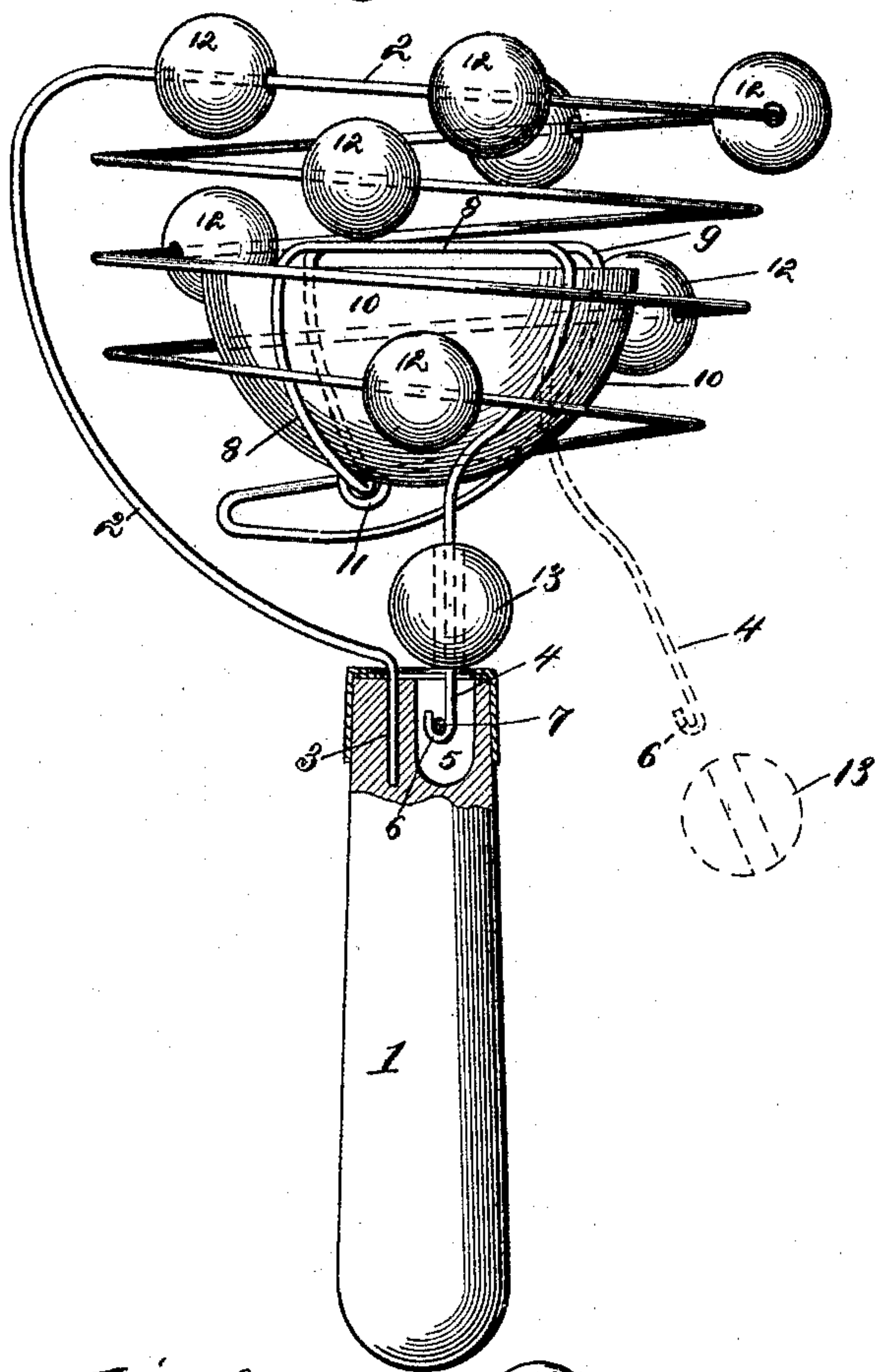
(No Model.)

C. I. DAYTON.  
PUZZLE.

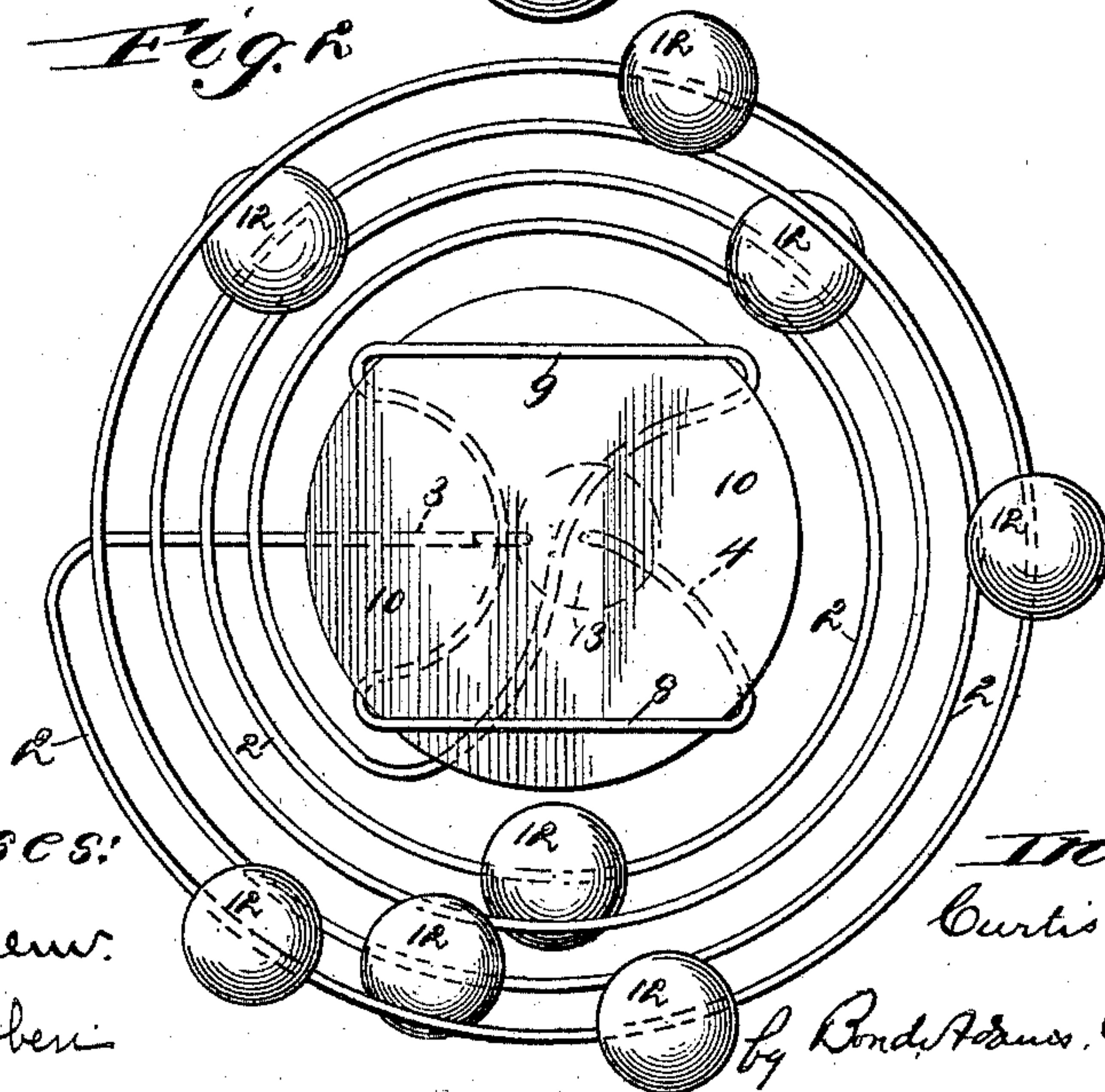
No. 495,724.

Patented Apr. 18, 1893.

*Fig. 1*



*Fig. 2*



*Witnesses:*

*Wm. M. Rheem.*  
*Ellie McKibben.*

*Inventor:*  
*Curtis I. Dayton*

*By Bond, Adams, Pickard & Jackson*



# UNITED STATES PATENT OFFICE.

CURTIS I. DAYTON, OF MENOMINEE, MICHIGAN.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 495,724, dated April 18, 1893.

Application filed November 5, 1892. Serial No. 451,261. (No model.)

*To all whom it may concern:*

Be it known that I, CURTIS I. DAYTON, a citizen of the United States, residing at Menominee, in the county of Menominee and State of Michigan, have invented a certain new and Improved Puzzle, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation; and Fig. 2 is a top or plan view.

My invention relates to puzzles, and has for its object to produce a representation of the assembling of the nations of the world at the World's Columbian Exposition, by means of a toy puzzle; which object I accomplish as hereinafter specified and as illustrated in the drawings.

That which I regard as new will be pointed out in the claims.

My improved puzzle consists of a wire spirally arranged, upon which are mounted a number of balls representing the different nations of the earth. All but one of the balls are so placed upon the wire as to be readily movable from one point to another, and all such balls may be assembled or brought into proximity to each other. One of the balls, however, is mounted upon a separate part of the wire, and is separated from the remaining balls by an impassable obstacle. The problem is to so manipulate the balls and other parts of the puzzle as to move the isolated ball to the other balls.

In the drawings,—1 indicates a handle, which carries a wire 2. One end, 3, of the wire 2 is rigidly fixed in the handle 1, as shown in Fig. 1. The wire thence extends away from the handle and is twisted spirally, as shown, and the other end, 4, extends downward through the coil and is removably secured in a recess 5 in the handle, by means of a hook 6 which engages a cross-bar 7. The arrangement is such that by pressing the end 4 of the wire inward it may be detached from the cross-bar 7 and removed from the handle 1, as indicated by dotted lines in Fig. 1. Near the end 4 of the wire 2 the wire is bent to form two loops 8 and 9, which are substantially similar, as shown in the drawings; that portion of the wire between the two loops being curved downward, as shown in Fig. 1.

10 indicates a block, hemispherical in shape,

which is adapted to be held between the two loops 8 and 9, as shown in the drawings; the upper portions of the loops being adapted to extend across the flat portion of the block 10, as shown in Fig. 2, thereby holding it in position.

11 indicates a staple or ring which is secured in that portion of the block 10 which is normally on the under side, which staple is adapted to receive the wire 2, as shown in Fig. 1.

12 indicates one or more balls, which are perforated and mounted upon the wire 2 between the block 10 and the end 3 of the wire 2, as shown in Fig. 1.

13 indicates a ball which is mounted upon the wire 2 between the end 4 thereof and the block 10.

The parts being in the position shown in Fig. 1, it will be seen that the balls 12 may all be assembled by moving them along the wire 2. It will, however, be impossible to move the ball 13 into proximity to the other balls because of the fact that it cannot pass the block 10. To accomplish the feat of associating the ball 13 with the balls 12,—which is the problem of the puzzle, as above stated, the end 4 of the wire 2 is unhooked from the cross-bar 7 and moved away from the handle, as indicated by dotted lines in Fig. 1. The ball 13 is then slipped over the end of the wire, as indicated by the dotted lines. The block 10 is then removed from the wire 2 by turning it in such position that its staple 11 will move toward the end 4 of the wire. After the block 10 has been removed the ball 13 is replaced upon the wire and can then be moved into contact with the remaining balls, after which the block may be replaced and the end 4 hooked in the handle.

I do not wish to limit myself to the use of balls, as other similar devices could be used.

The specific shape of the block shown is not material.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination with a handle, and a wire, one end of which is rigidly secured to the handle, the other end being detachably secured thereto, of balls mounted upon said wire, a block mounted upon said wire between said balls and the detachable end of said wire,



and a ball mounted upon said wire between said block and the detachable end of said wire, substantially as and for the purpose specified.

2. The combination with a handle, and a  
5 wire 2, one end of said wire being rigidly secured to the handle and the other end being detachably secured thereto, of a block 10 mounted upon said wire, said block having a staple 11, balls 12 between said block and the  
10 end of said wire which is rigidly connected to said handle, and a ball 13 adapted to be carried upon the movable end of said wire, substantially as and for the purpose specified.

3. The combination with a handle 1, hav-  
15 ing a recess 5 and cross-bar 7, of a wire 2, one end of which is rigidly secured to said handle, a hook 6 upon the other end of said wire,

said hook being adapted to engage the cross-bar 7 to secure said end of the wire in the handle, balls, and a block, substantially as 20 and for the purpose specified.

4. The combination with a handle, and a wire 2, having one end rigidly secured to said handle, the other end being detachably secured thereto, the portion of said wire be- 25 tween the two ends being spirally arranged and being provided with loops 8 and 9 adapted to clasp a block, of balls and a block mounted upon said wire, substantially as and for the purpose specified.

CURTIS I. DAYTON.

Witnesses:

GEORGE CHRISTAP,  
ALBERT J. PAULI.