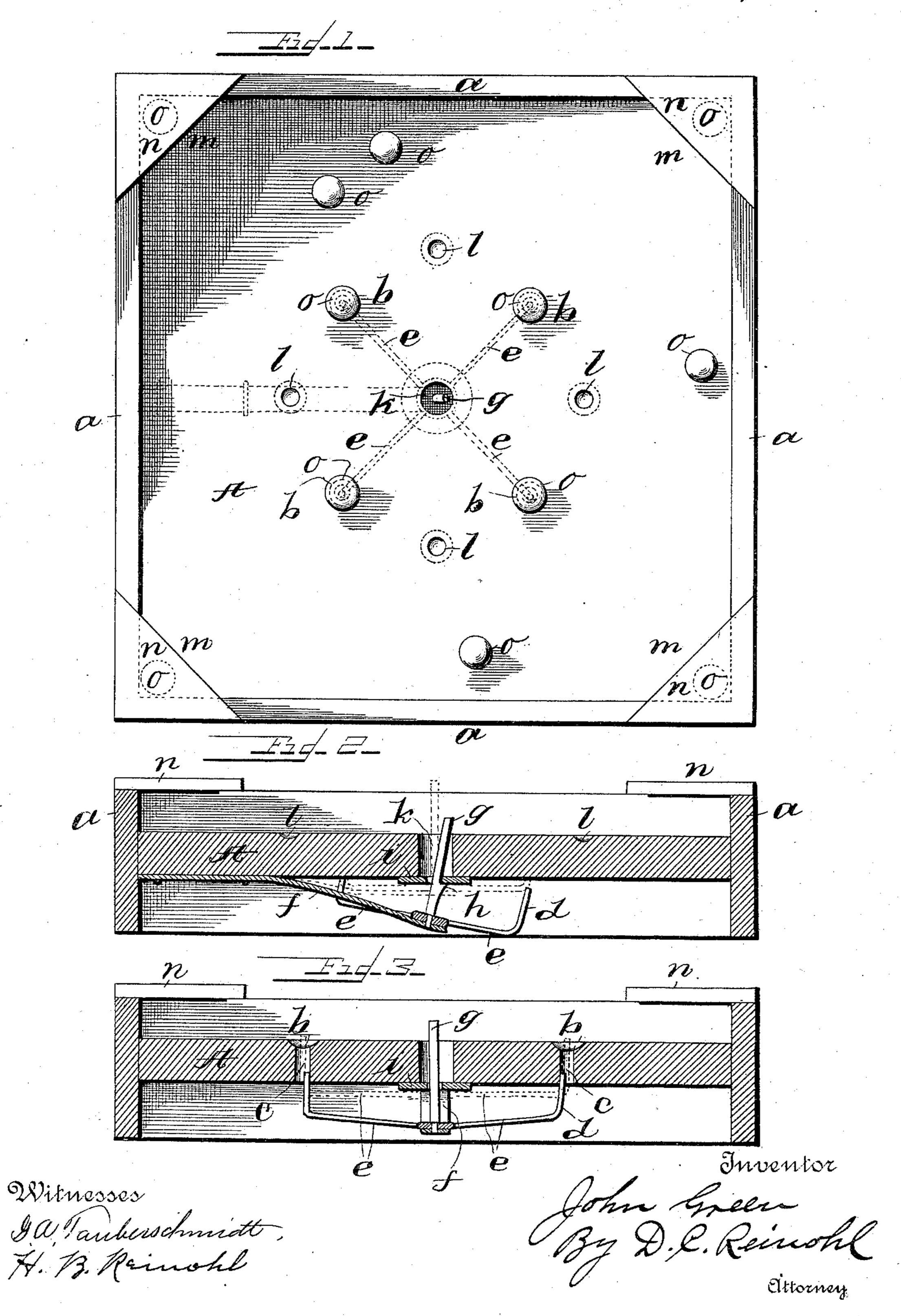
J. GREEN. PUZZLE.

No. 493,768.

Patented Mar. 21, 1893.



United States Patent Office.

JOHN GREEN, OF RENOVO, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO CHARLES NORBERG, OF SAME PLACE.

SPECIFICATION forming part of Letters Patent No. 493,768, dated March 21, 1893.

Application filed October 1, 1892. Serial No. 447,533. (No model.)

To all whom it may concern:

Be it known that I, John Green, a citizen of the United States, residing at Renovo, in the county of Clinton and State of Pennsylvania, 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 it ap-10 pertains to make and use the same.

My present invention relates to puzzles or games in which marbles are rolled from one part of a board to another and deposited in cavities and pockets, and consists in certain 15 improvements which will be fully disclosed in the following specification and claims.

In the accompanying drawings which form part of this specification, Figure 1, represents a plan view of my invention, and Figs. 2 and 2c 3 vertical sections thereof.

Reference being had to the drawings and the letters thereon A indicates a board which is provided with a border a projecting above and below the board, the upper surface of 25 which board may be properly designated as the field on which the puzzle is operated or the game played. In the field or center portion of the board is a series of cavities or depressions b under which are holes or aper-30 tures c which extend through the board and are each provided with a stud or pin d attached to or forming part of a spider having four arms e, e, e, e. The spider is attached to a leaf spring f, secured to the under side of 35 the board, and from the upper side of the spider projects a rod or stud g which is provided with a notch or shoulder h which engages a plate i on the under side of the board to set the spring and constitute a tripping 40 mechanism. The rod g is operated in an apwhich it projects and is set by depressing the rod and the spring from the upper side of the board and engaging the shoulder h with 45 the plate i, as shown in Fig. 2. The pins don the arms e of the spider are of a length equal to or slightly in excess of the thickness of the board so that the marbles may not rest fully in the cavities b, but may lodge on the 50 edge thereof as they are rolled about on the l

board. Intermediate of the cavities b are other cavities l which are not provided with apertures under them or with rods, and on each corner of the board are pockets m formed by the two right angled sides of the border a_{55}

and by the cover n.

In practicing the puzzle or game, the spring, spider and rods d are depressed as shown in full lines in Figs. 2 and 3, and four marbles are placed in the cavities b, and the remain- 60 ing four thrown upon the board in the field promiscuously. The work now commences by first displacing the marbles from the cavities and must be done without touching them or forcibly removing them by blowing them 65 out of the cavities; to avoid which the rod qis pushed to one side disengaging the tripping mechanism and projecting the rods d through the apertures c and ejecting the marbles out of the cavities. The marbles will now all be 70 in the field, and must be manipulated by placing the ejected marbles in the cavities l and the other four marbles, one in each of the pockets m, to effect which the board must be inclined to roll the several marbles into their 75 required positions. Should any of the ejected marbles lodge on the cavities b, they must be dislodged by driving them off by striking them with one of the other marbles, which must be rolled with considerable force, in do- 80 ing which frequently all the other marbles which had been properly seated are displaced.

To operate the puzzle or game the board is held in the hand or hands of the person playing and must be manipulated to place the 85 several marbles in their respective places without touching any of them.

Having thus fully described my invention, what I claim is—

1. A game board provided with a projecting 90 erture k in the center of the board through | border and a series of depressions, and apertures through the board under said depres. sions, in combination with a spring, a spider supported by said spring and provided at its ends with upturned arms engaging said aper- 95 tures, and a tripping mechanism.

2. A game board provided with a projecting border, pockets in the corners of the board, a series of depressions in the center of the board, apertures through the board undersaid 100 depressions, and intermediate depressions, in combination with a spring, a spider supported by said spring and provided at its ends with upturned arms engaging said apertures, a rod extending through the board and having a shoulder, and a plate engaged by said shoulder to set the spring and spider.

3. A puzzle consisting of a board having a projecting border, a central aperture and a series of depressions around said aperture and

provided with rods or pins, a spring, a notched rod and means for setting said rod, and suitable movable bodies.

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

JOHN GREEN.

Witnesses:

D. C. REINOHL,

H. B. REINOHL.