

No. 702,477.

Patented June 17, 1902.

J. PUTNAM.  
GAME OR PUZZLE.

(Application filed June 14, 1901.)

(No Model.)

Fig. 1

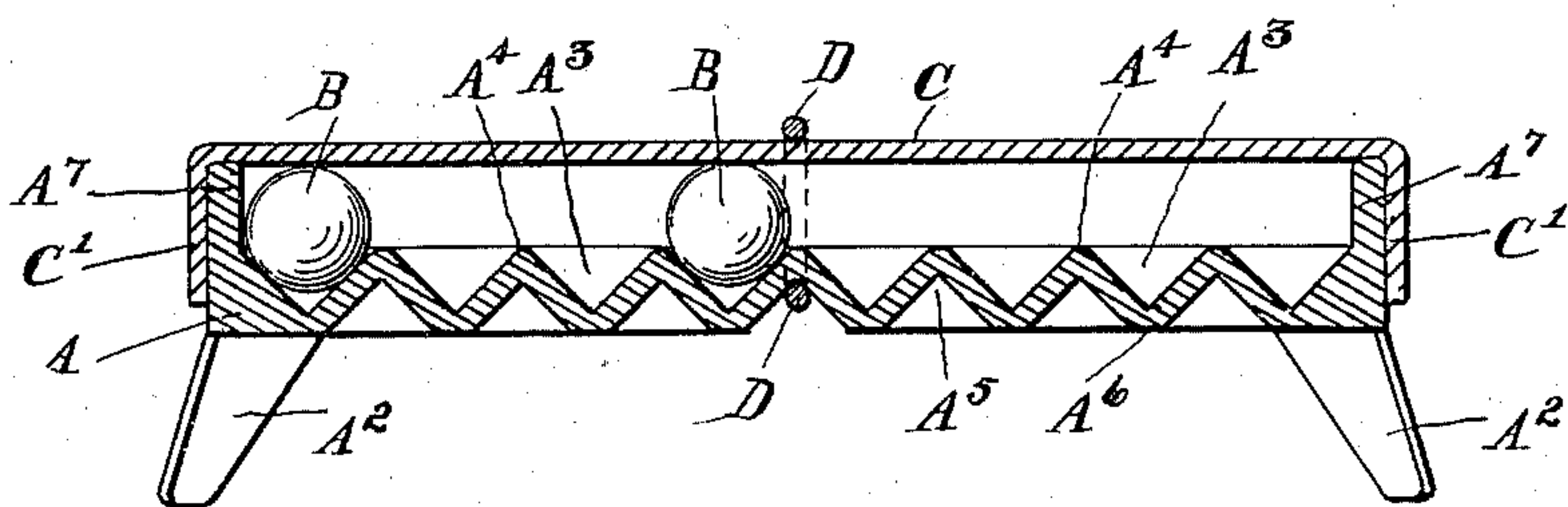
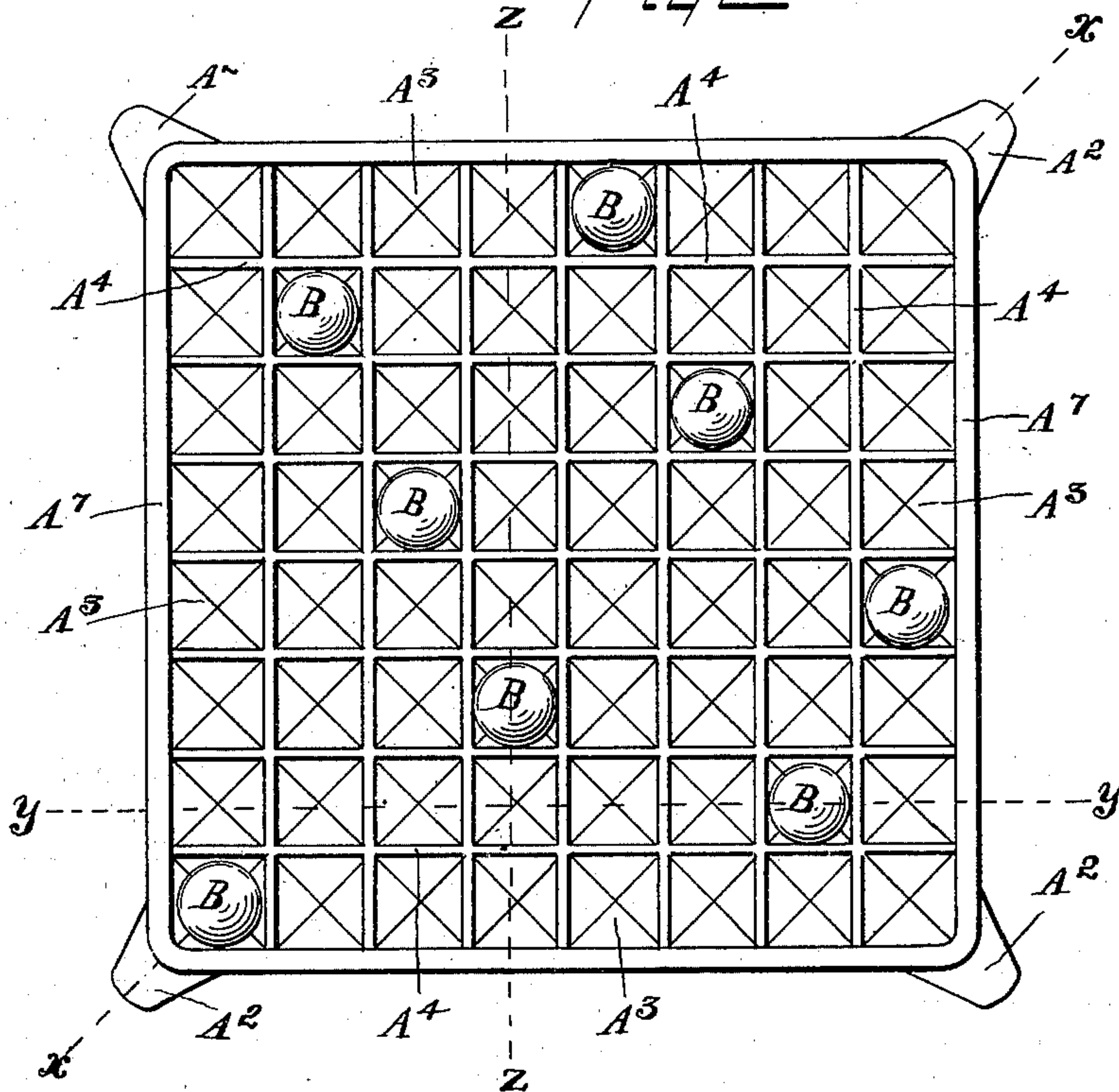


Fig. 2



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN PUTNAM, OF CORNELL, PENNSYLVANIA.

## GAME OR PUZZLE.

**SPECIFICATION** forming part of Letters Patent No. 702,477, dated June 17, 1902.

Application filed June 14, 1901. Serial No. 64,518. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN PUTNAM, a citizen of the United States, residing at Cornell, in the county of Bucks and State of Pennsylvania, have invented a certain new and useful Improvement in Games or Puzzles, of which the following is a full, clear, and exact description, reference being had to the drawings which accompany and form a part of this specification, in which—

Figure 1 is a vertical transverse section of a device embodying my invention, taken along the dotted line  $y y$  of Fig. 2, the retaining-cover shown in place and the device adapted for transportation without disarranging the position of the movable objects contained therein; and Fig. 2 is a top view of a device embodying my invention in which the retaining-cover has been removed and the movable objects are made accessible for manipulation.

The lettering in both figures is uniform.

My invention relates to the construction of a game or puzzle or analogous device adapted to present movable objects in a recessed space, such as balls or other objects of suitable form, said recessed space divided into a series of smaller recesses or cavities in which said balls freely seat themselves, but can be readily moved from one cavity to an adjacent one to work out the game, calculation, or puzzle, and in connection therewith a cover adapted to be applied to said recessed space and means for securing said cover thereto, said cover adapted by forming a close contact with the upper surfaces of said balls or like objects to retain the same in their appropriate cavities, so that the working of said game, calculation, or puzzle may be stopped at any stage and again resumed at the same stage by removing said cover and continuing the operation of the device.

More specifically, my invention relates to the construction of an open box having raised sides, and the bottom of said box divided into a series of open recesses or cavities in which balls or like objects may be loosely held by gravity, said cavities being, preferably, eight in number transversely, either along the dotted lines  $y y$  or  $z z$  of Fig. 2, the corners thereof making a continuous diagonal series of cavities from each corner to its

diagonal opposite, as shown along the dotted line  $x x$  of Fig. 2 of the drawings. In this shallow open box are placed a series of balls or other like movable objects, which are adapted to serve as counters in the game, calculation, or puzzle and which are adapted by their size and shape to rest one in each of said cavities, either at the same time or in succession, being pushed or moved from one cavity to another, so that their positions will be accurately placed along straight lines, either transverse or diagonal. In the form shown in the drawings there are eight rows of such recesses or cavities, taken in either transverse direction, and in consequence in either diagonal from one corner of said box to the other. There are also eight balls, each of which is fitted to rest in any one of these sixty-four cavities. The problem, game, or puzzle, as shown in the drawings, is to so place these eight balls in eight of the sixty-four cavities that no two of the balls are on the same transverse line of cavities, either up and down or across, nor on the same diagonal line, whether from corner to corner or any other straight diagonal of the board.

In the positions shown in Fig. 2 of the drawings there are two balls on the line  $x x$  and also on its opposite diagonal. Hence the problem is unsolved.

A solution of the problem will be found when the balls are placed along the sixty-four spaces, taken horizontally, first from left to right for row 1, from right to left for row 2, and so on, in the following order: 3, 11, 18, 26, 33, 45, 56, and 60.

As shown in the drawings the chances against solution are very great, as each ball must have a definite position from start to finish to produce the correct result.

Referring to the drawings, A, with its different ordinals, represents the box, surrounded by a raised rim  $A^7$ . The bottom is divided into the series of cavities  $A^3 A^3$ , separated by the ridges  $A^4 A^4$ . For lightness these cavities are correspondingly recessed on the under side at  $A^5 A^5$ , beneath the ridges  $A^4 A^4$  above. These cavities are preferably square pyramidal, meeting in a point at each center; but they may be curved or flat, if preferred, and preferably of cast metal. Around the edge be-



low, at  $A^6$ , the rim  $A^7$  is prolonged downward to form a secure seat for the cover C and add strength to the box. I make this box and its parts of metal, preferably; but it may be of wood, rubber, or other material. At the corners are shown feet  $A^2 A^2$ , cast integrally with the box, which raise the box from the table on which it is used and give it a level support. The cover C may be of pasteboard, of stamped metal, or other material. It is provided with sides  $C' C'$ , which are adapted to fit around the sides of the rim  $A^7 A^7$  of the box beneath. It will be seen that, as shown in Fig. 1, the balls when seated in their recesses extend just up to the top level of the rim  $A^7$  or to such distance that when said cover C is down upon said box and its rim the balls will be retained in their cavities by means of the ridges  $A^4 A^4$  between the same. When the cover C is in place, it is retained by an india-rubber band D, though other means, such as hinges or catches, may be used instead thereof. The balls when the cover is removed can be readily rolled about from cavity to cavity, while the rim  $A^7$  will prevent their escape from said box or containing-space. The balls B B B B, &c., may be of metal or of other material. I preferably color them sharply in contrast with the color of the inside of the box, so that their positions and directions can be readily distinguished with reference to the rows of cavities.

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

1. A game or puzzle consisting of an open, shallow box, the bottom thereof provided with series of rows of cavities, separated by ridges, and a marginal rim around said box, in combination with a cover adapted to close over said box, together with a series of movable balls or the like, adapted to said cavities, and extended upward, when in said cavities, above the same, and said cover adapted to prevent said balls or the like from being shifted from one cavity to another when said cover is down in place, and means for detachably maintaining said cover in said position, substantially as and for the purposes described.

2. The combination of shallow box having rows of cavities,  $A^3 A^3$ , arranged in equal series in a square, a marginal rim,  $A^7$ , around said cavities, supporting-feet,  $A^2 A^2$ , movable balls, B B, and detachable cover, C C', constructed to rest upon said rim, and said balls, and prevent escape of said balls from said cavities, the whole constructed and arranged substantially as and for the purposes described.

JOHN PUTNAM.

Witnesses:

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