

No. 740,980.

PATENTED OCT. 6, 1903.

J. W. HUGHES.
PUZZLE GAME DEVICE.
APPLICATION FILED MAR. 2, 1903.

NO MODEL.

Fig. I.

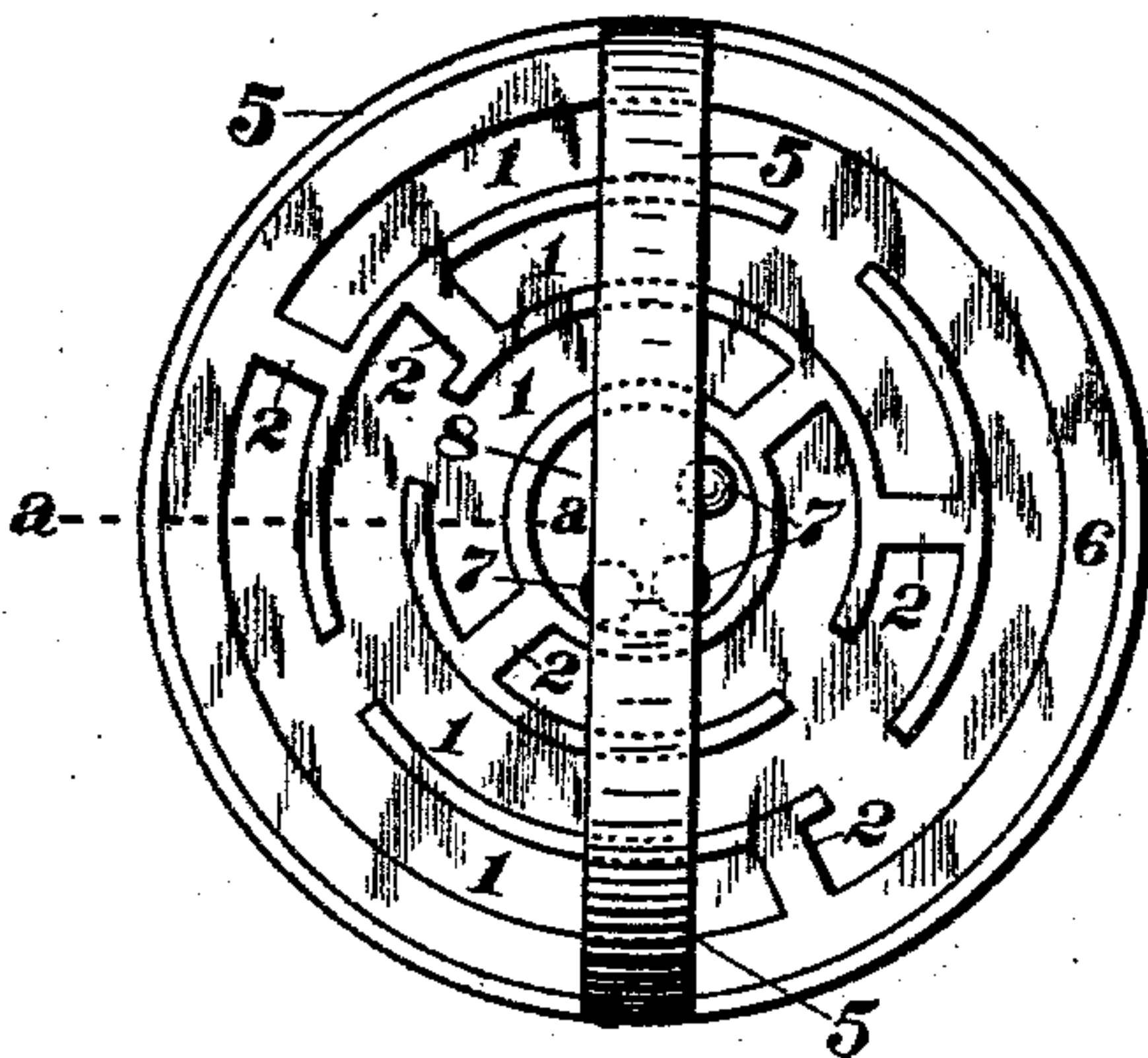


Fig. II.

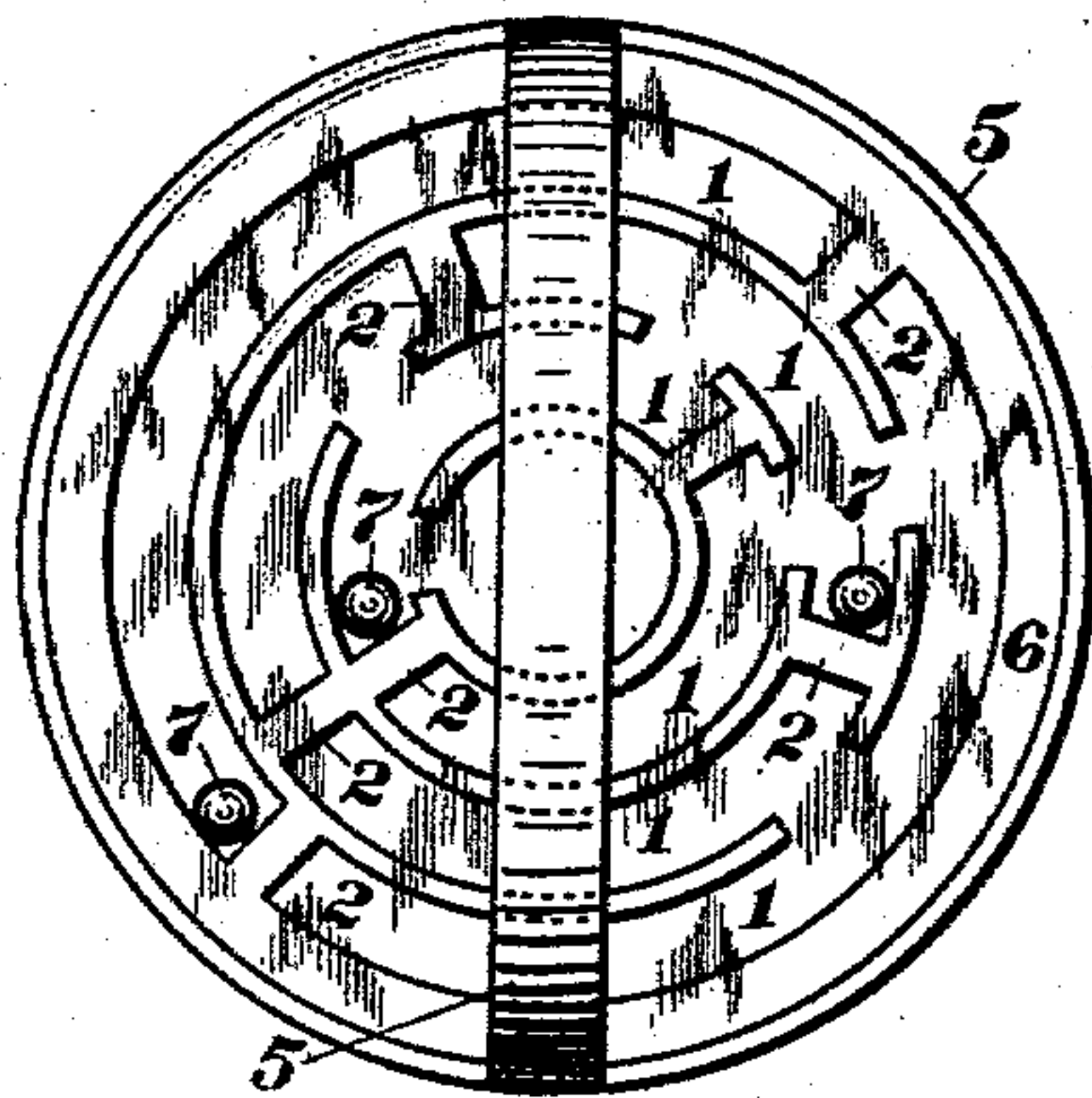


Fig. III.

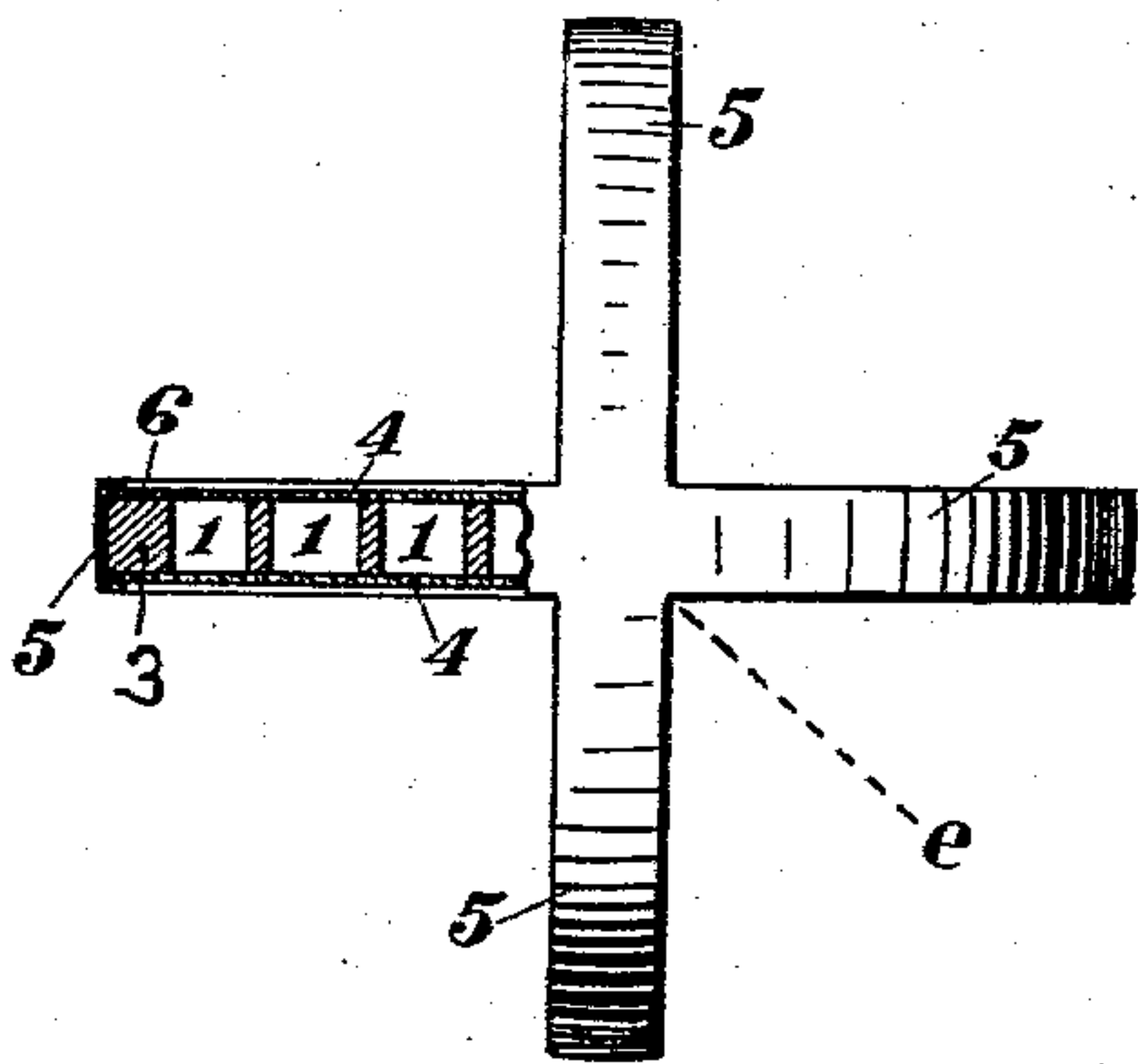
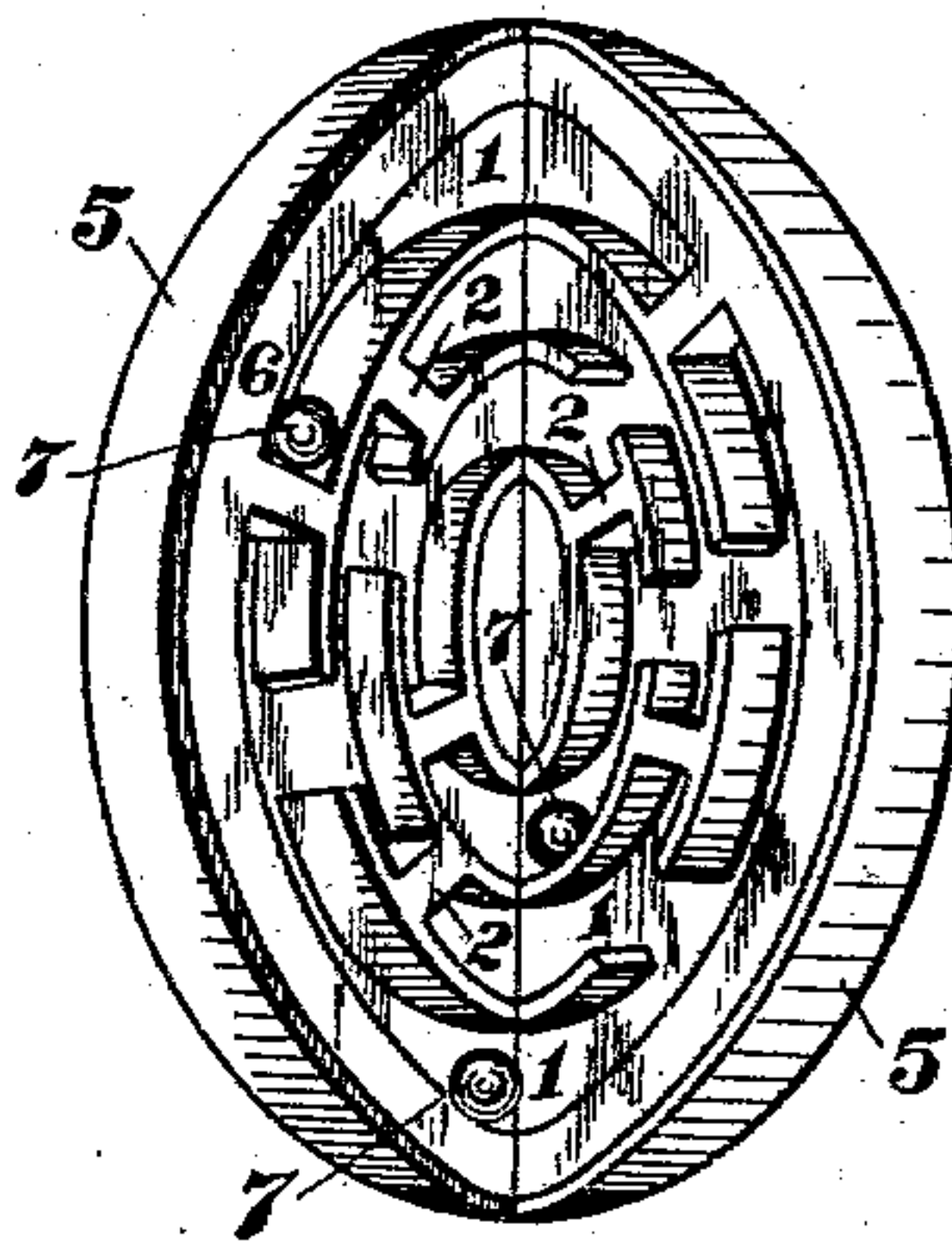


Fig. IV.



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UNITED STATES PATENT OFFICE.

JOHN W. HUGHES, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO THOMAS L. HILL, OF SAN FRANCISCO, CALIFORNIA.

PUZZLE-GAME DEVICE.

SPECIFICATION forming part of Letters Patent No. 740,980, dated October 6, 1903.

Application filed March 2, 1903. Serial No. 145,721. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. HUGHES, a citizen of the United States, residing at San Francisco, county of San Francisco, and State of California, have invented certain new and useful Improvements in Puzzle-Game Devices; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to an amusement puzzle game of a novel nature, consisting of two sets of interrupted runways each in the form of a maze of circular shape disposed in two planes set at a right angle to each other and communicating at a right angle at the intersection between the two planes and rolling balls therein.

The object of the game is to assemble the balls, preferably three in number, in the center compartment of one of the runways, performed by manipulating these and the device as a whole so the balls by their gravity will move through certain courses not describable here until they are all assembled as above stated.

Constructively the device consists of two sets of interrupted channels or runways set normally to each other inclosed by encircling bands and translucent coverings on all sides, as shown in the drawings herewith, forming a part of this specification.

Figure I represents one side of the puzzle device; Fig. II, a similar view at an angle of ninety degrees from Fig. I; Fig. III, a plan view of Figs. I and II, partially in section, on the line *a* in Fig. I, showing the transparent covering 4; and Fig. IV, a view oblique to the faces on the line *e* in Fig. III.

The chambers or runways 1 are of rectangular section, as shown in Fig. III, and have interrupting-bars 2, as respectively indicated in Figs. I and II, and intersect each other in the two planes, as shown in Fig. IV.

The outer cylindrical part of frame 3 is preferably made integral with the runways 1 and is formed of any suitable material that can be molded or pressed into form in a plastic state. The translucent covering-plates 4 are by preference made of some flexible material,

such as celluloid or mica, and are held by shallow rims 5, that are crimped over the edges, or may be held on the faces 6 by a suitable cement.

I do not confine myself to a particular kind of material or to a special manner of constructing the device, as these can be varied in many ways, as will be understood.

The balls 7 are made of metal or any other suitable material that has some weight to cause them to roll with slight inclination from a level plane. By proper manipulation of the device the balls 7 can be assembled in the center compartment 8, which has no inlet in the same plane, as shown in Fig. I. This requires dexterous and patient effort and is sufficiently difficult to form an interesting amusement.

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a puzzle-game device, two sets or series of interrupted circular channels or runways, joined normally one to the other and communicating in both planes, balls therein that by their gravity and position of the device may traverse the runways in either plane, or in any course as the position of the device may determine, substantially as specified.

2. In a puzzle-game device, a series of interrupted circular runways set normal to each other, communicating and inclosed between translucent coverings, balls therein visible from either side of the runways, substantially as specified.

3. In a puzzle-game device, a series of concentric interrupted runways disposed in two planes at a right angle one to the other, translucent coverings for these runways, rolling balls therein, and in one plane an inclosed central compartment having a passage outward or inward for the balls in the opposite plane, substantially as specified.

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

JOHN W. HUGHES.

Witnesses:

P. W. J. LANDER,
J. C. GARRETT.