

No. 736,767.

PATENTED AUG. 18, 1903.

D. McPHERSON.

PUZZLE.

APPLICATION FILED FEB. 6, 1903.

NO MODEL.

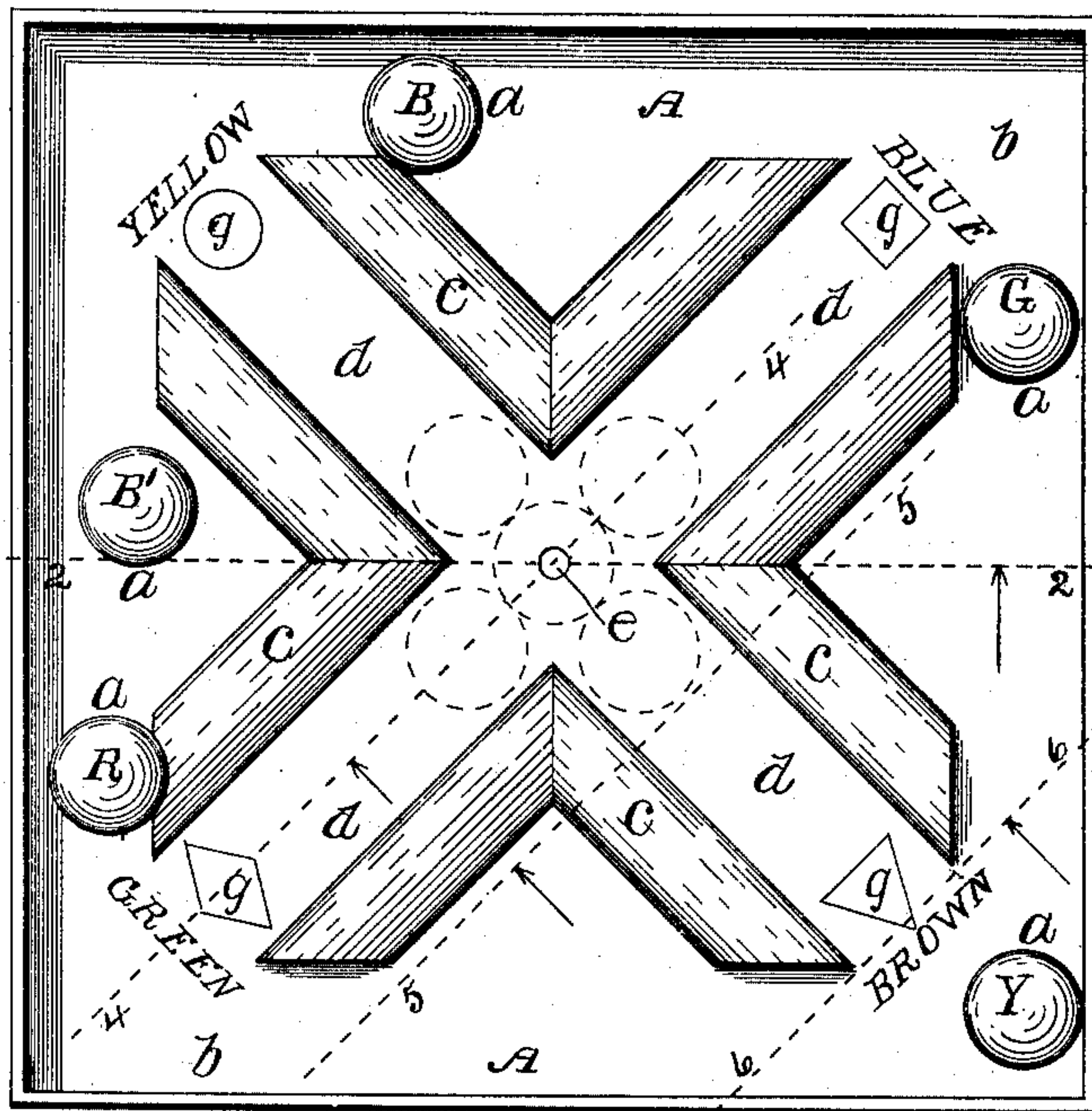


Fig. 1.

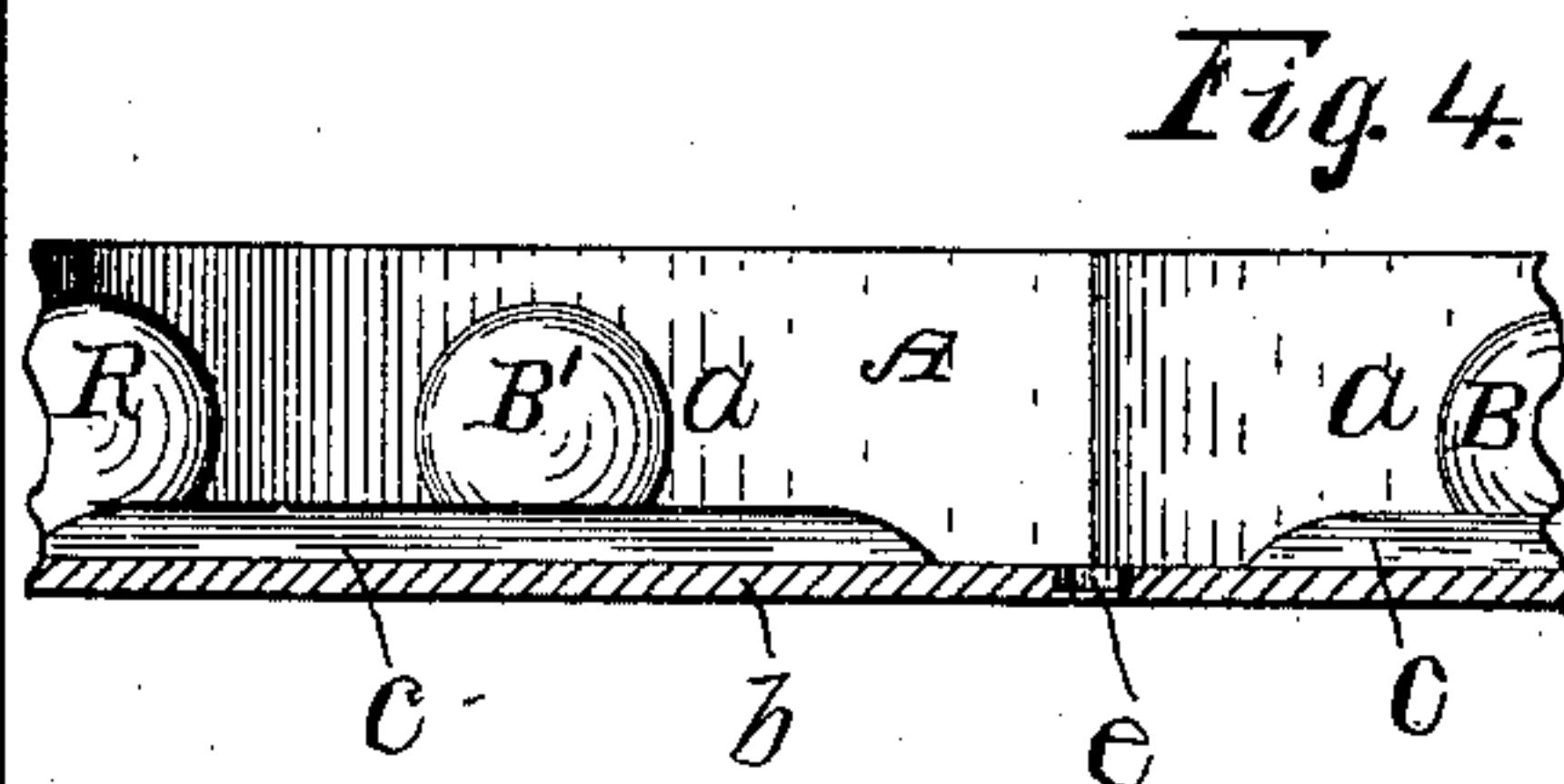


Fig. 4.

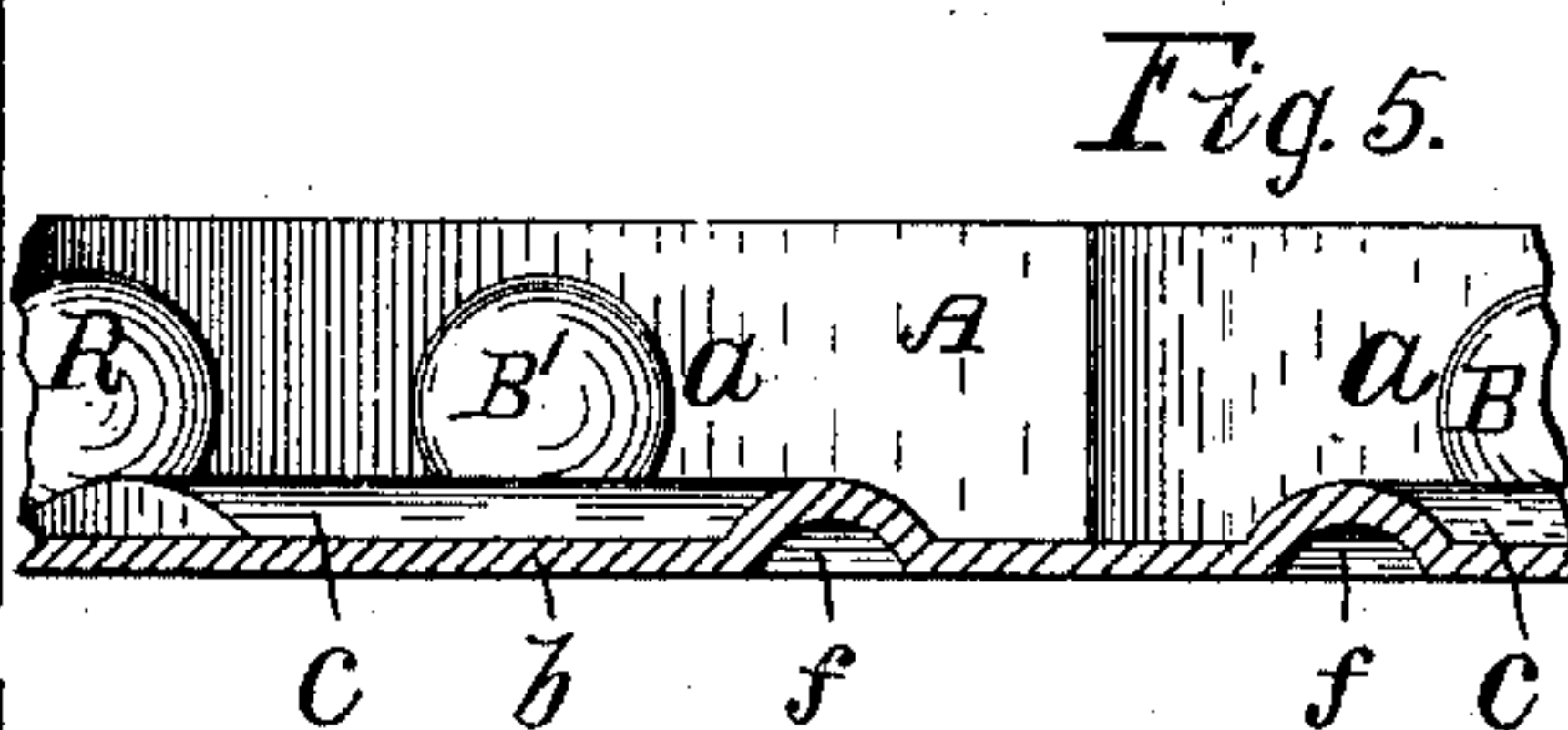


Fig. 5.

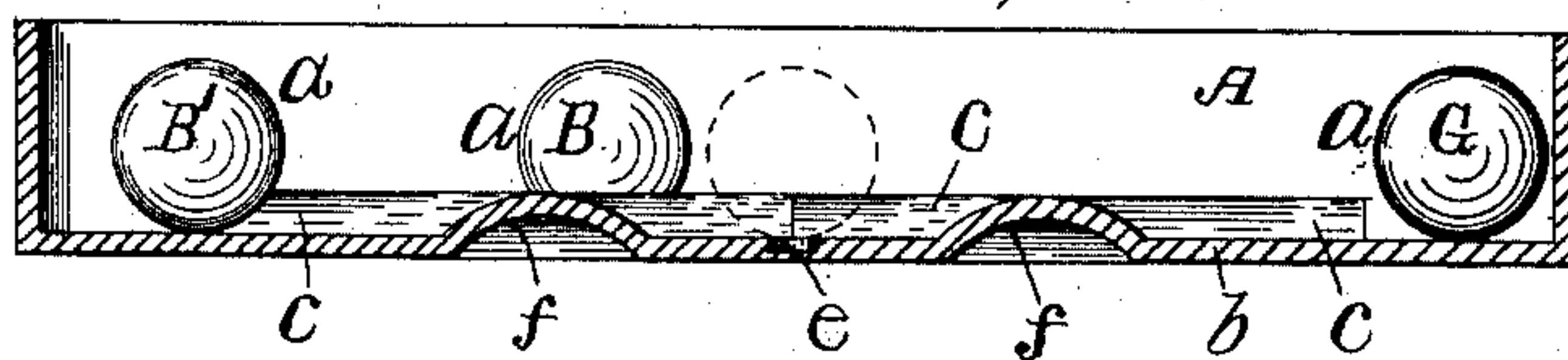


Fig. 2.

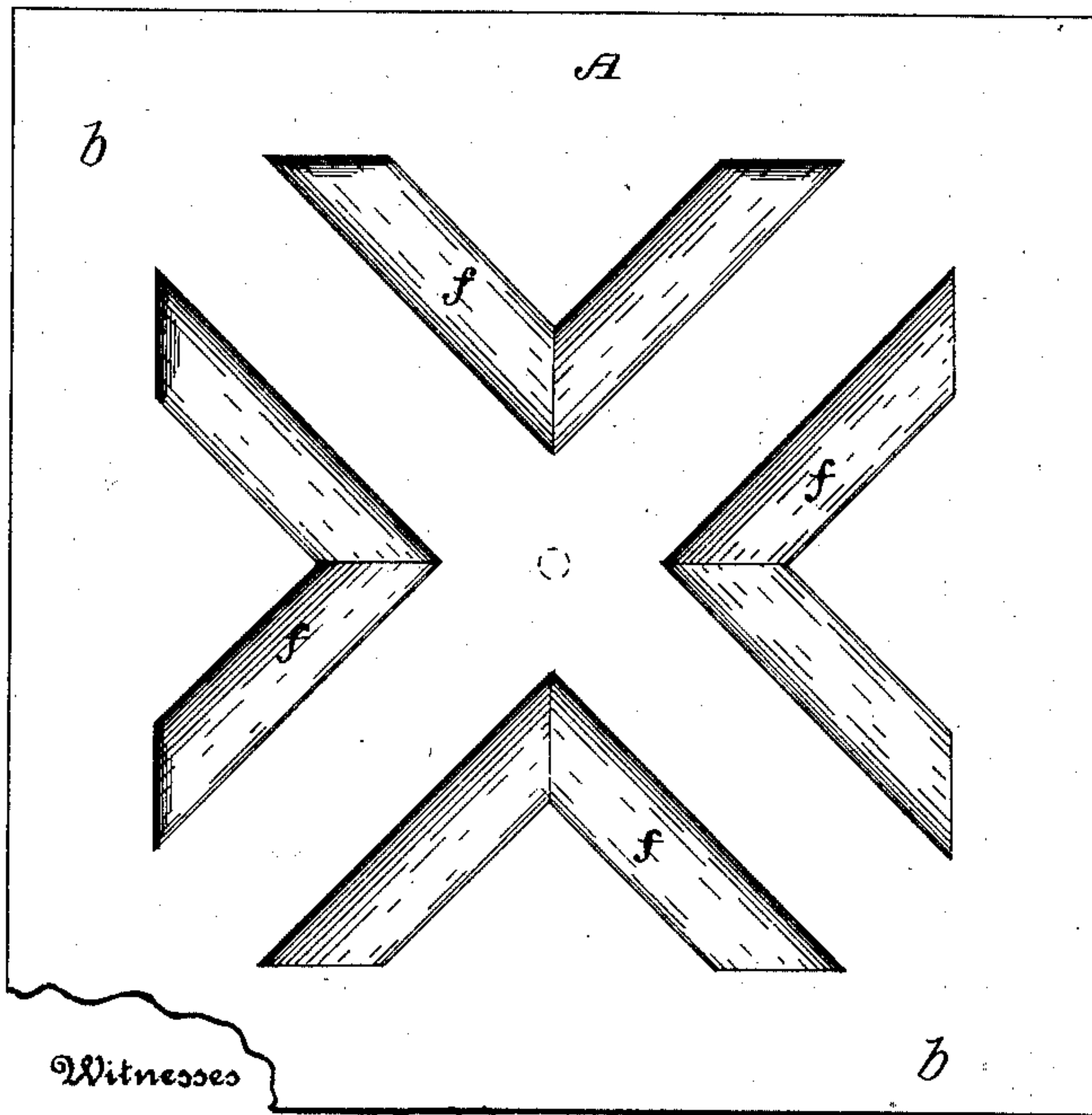


Fig. 3.

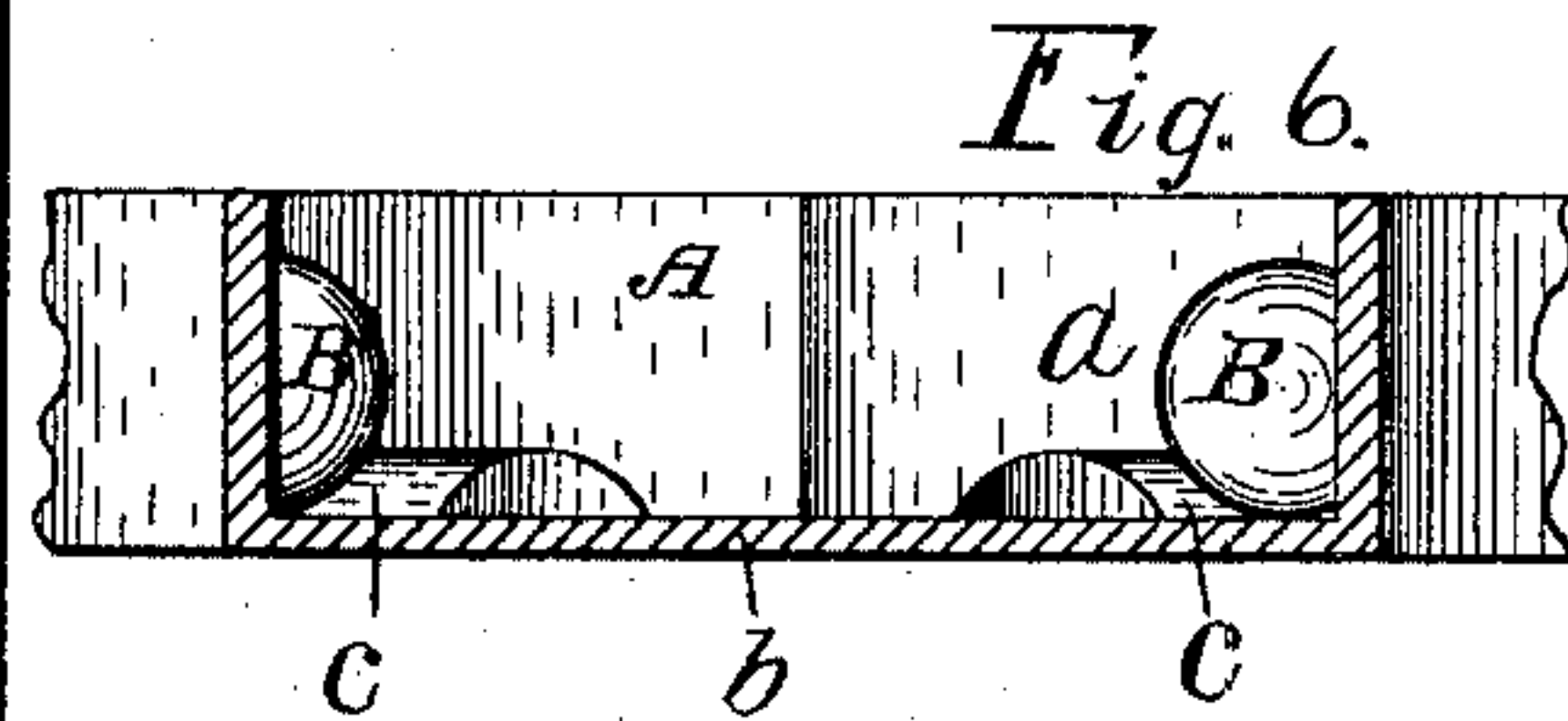


Fig. 6.

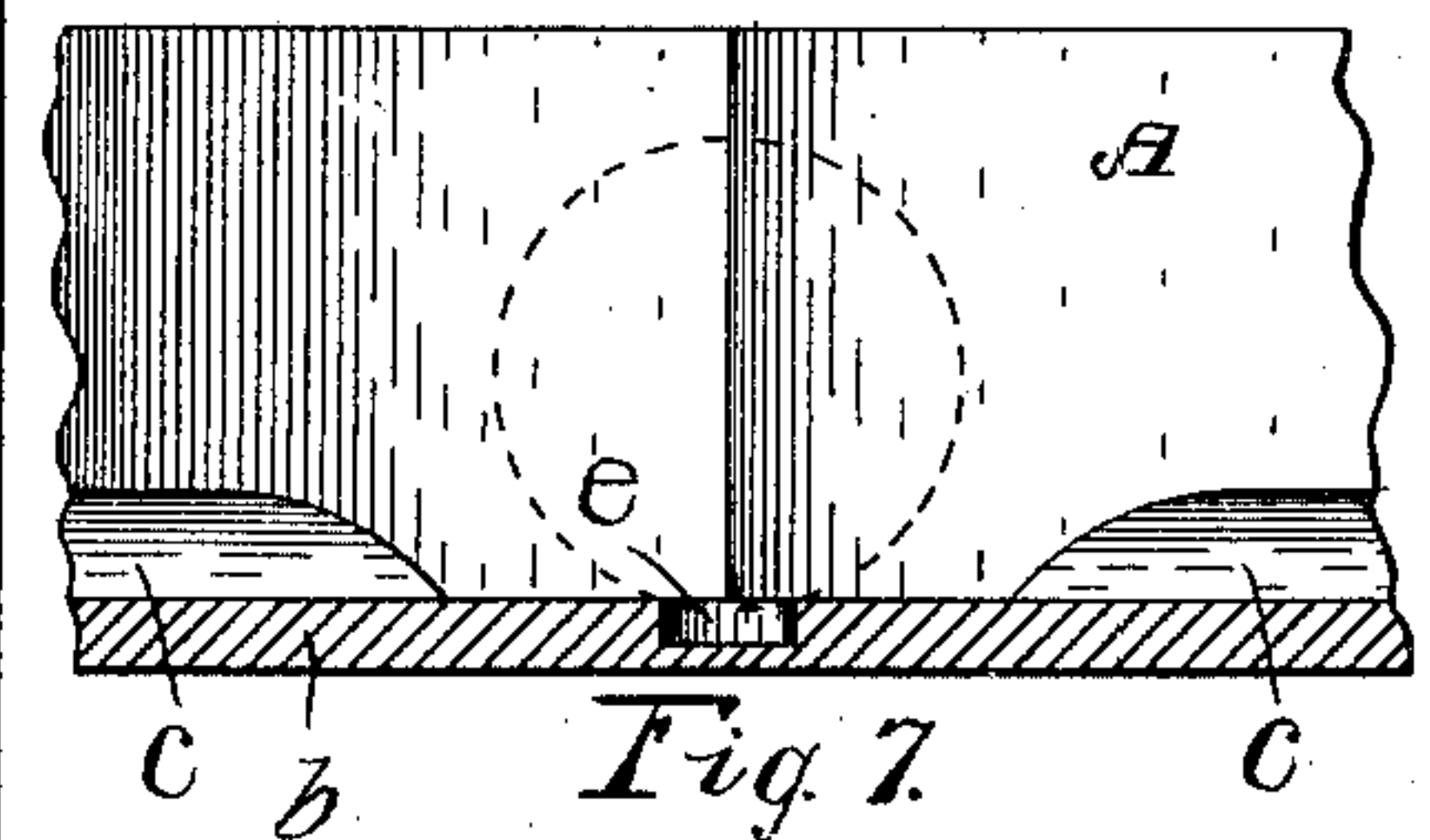


Fig. 7.

Witnesses

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DONALD MCPHERSON, OF PALMYRA, NEW YORK.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 736,767, dated August 18, 1903.

Application filed February 6, 1903. Serial No. 142,153 (No model)

To all whom it may concern:

Be it known that I, DONALD MCPHERSON, of Palmyra, in the county of Wayne and State of New York, have invented a new and useful Improvement in Puzzles, which improvement is fully set forth in the following specification, and shown in the accompanying drawings.

My invention is a puzzle, the same consisting of a box or inclosure and a series of differently-colored balls, as marbles, therein, designed to be rolled about the bottom or floor of the box by the player, the box being successively tilted in a manner to collect or bunch the balls in accordance with a prearranged scheme or plan.

The invention is hereinafter fully described, and more particularly pointed out in the claims, reference being had to the accompanying drawings, forming a part of this specification.

Figure 1 is a plan of the device looking into the inclosing box. Fig. 2 is a vertical transverse section on the dotted line 2 2 in Fig. 1. Fig. 3 is a view of the under side of the box, aiding to show its construction. Fig. 4 is a vertical section of the middle part of the box, taken on the diagonal dotted line 4 4 in Fig. 1. Fig. 5 is a vertical section of parts of the box, taken on the dotted line 5 5 in Fig. 1. Fig. 6 is a vertical section taken on the dotted line 6 6 in Fig. 1. Fig. 7, drawn to an enlarged scale, is a vertical section of the middle part of the box on the dotted line 4 4 in Fig. 1, better showing the central rest for the commanding ball or marble.

In the drawings, A is a box or inclosure for holding a series of balls or marbles *a*, each of a color different from the others. The bottom or floor *b* of the box has equal angular parts *c*, raised above or out of the plane of the floor, arranged to inclose between their opposing parallel sides or edges straight diagonal channels or alleys *d d*, intersecting at right angles at the middle of the floor *b*, as shown in Fig. 1. The raised parts *c* are all equally spaced, with the inclosed alleys *d* of equal width and having their middle lines intersecting at the center of the floor, at which point is formed in the floor a circular indentation *e*, as shown in Fig. 7, constituting a seat for the commanding marble. Each raised part is formed

with two branches meeting in a right angle, said angles being all turned toward the seat *e* and the ends of the branches facing the side vertical walls of the box with spaces between them and the walls for the balls to move in.

The parts *c* may be separate pieces secured to the floor or bottom of the box; but I prefer to form them directly of portions of the material of the floor itself, the same being pressed upward from beneath while wet and in a plastic state, corresponding depressions *f*, Fig. 3, being formed in the under surface of the bottom of the box. The outer or extreme ends of the alleys *d* are open to permit the balls to enter or roll therein, the floors of the alleys being parts of the original floor of the box and in the same plane therewith.

The balls or marbles *a* are of different colors, as blue, brown, green, red, and yellow, indicated in this order by the letters "B," "B'," "G," "R," and "Y," all being primarily thrown promiscuously into the box when the working of the puzzle is commenced by the player.

The outer open ends or mouths of the alleys *d* are marked respectively to indicate or correspond with the colors of the four subordinate balls of the series. This may be done either by having the names of the colors, "Yellow," "Blue," "Green," "Brown," appear adjacent to the entrances of the several alleys or by having small fields *g*, of said colors, of circular, rectangular, or other form, as shown in Fig. 1, the forms also of these fields or figures indicating the several colors.

In working the puzzle the box is held in the hands of the player and the thing to be accomplished is to successively tilt the box to first cause the commanding marble (colored red) to assume its place on the cavity or rest *e* and then cluster around it the other marbles, as shown by dotted circles in Fig. 1, each marble to be brought into the alley marked to correspond with its own color.

Importance is attached to the fact that the raised portions are disposed so that the passages shall be at right angles to each other, and the opposite portions in alinement with each other and the depression at the intersection of the lines through the said passages will serve to hold a marble or ball, so as to block all of said passages; but when not thus

obstructed there will be no intervening wall or other portion to obstruct the passage directly across the box.

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

1. A puzzle consisting of an inclosing box
and a series of balls or marbles to roll upon
the floor of said box, said floor having parts
raised above or out of the plane of the floor
10 and coacting to form alleys for the balls to
traverse, said raised parts being equally
spaced with their opposing sides parallel and
each being formed with two branches and
having a right angle, all of which right an-
15 gles are turned toward the middle of the floor,
the said floor being formed with a depression
or seat for a ball at the intersection of the
middle lines of the alleys, the outer ends of
said angular raised parts being at right an-
20 gles to the upper surface of the floor to form
abutments for the balls, substantially as de-
scribed.

2. A puzzle consisting of an inclosing box
and a series of differently-colored balls or
25 marbles to roll upon the floor of said box, said

floor having parts raised above or out of the
plane of the floor and coacting to form alleys
for the balls to traverse, said raised parts be-
ing equally spaced with their opposing sides
parallel and each being formed with two 30
branches and having a right angle, all of which
right angles are turned toward the middle of
the floor, the said floor being formed with a
depression or seat for a ball at the intersec-
tion of the middle lines of the alleys, the outer 35
ends of said angular raised parts being at
right angles to the upper surface of the plane
to form abutments for the balls, said floor be-
ing provided near the open ends of the alleys
with small fields *g* of varying forms and of 40
colors corresponding to the different colors of
the balls or marbles.

In witness whereof I have hereunto set my
hand, this 2d day of February, 1903, in the
presence of two subscribing witnesses.

DONALD MCPHERSON.

Witnesses:

JOHN W. RUSHMORE,
JAMES K. POTTER.