

No. 658,197.

R. E. WICKES.
GAME.

Patented Sept. 18, 1900.

(Application filed Aug. 3, 1899.)

(No Model.)

3 Sheets—Sheet 1.

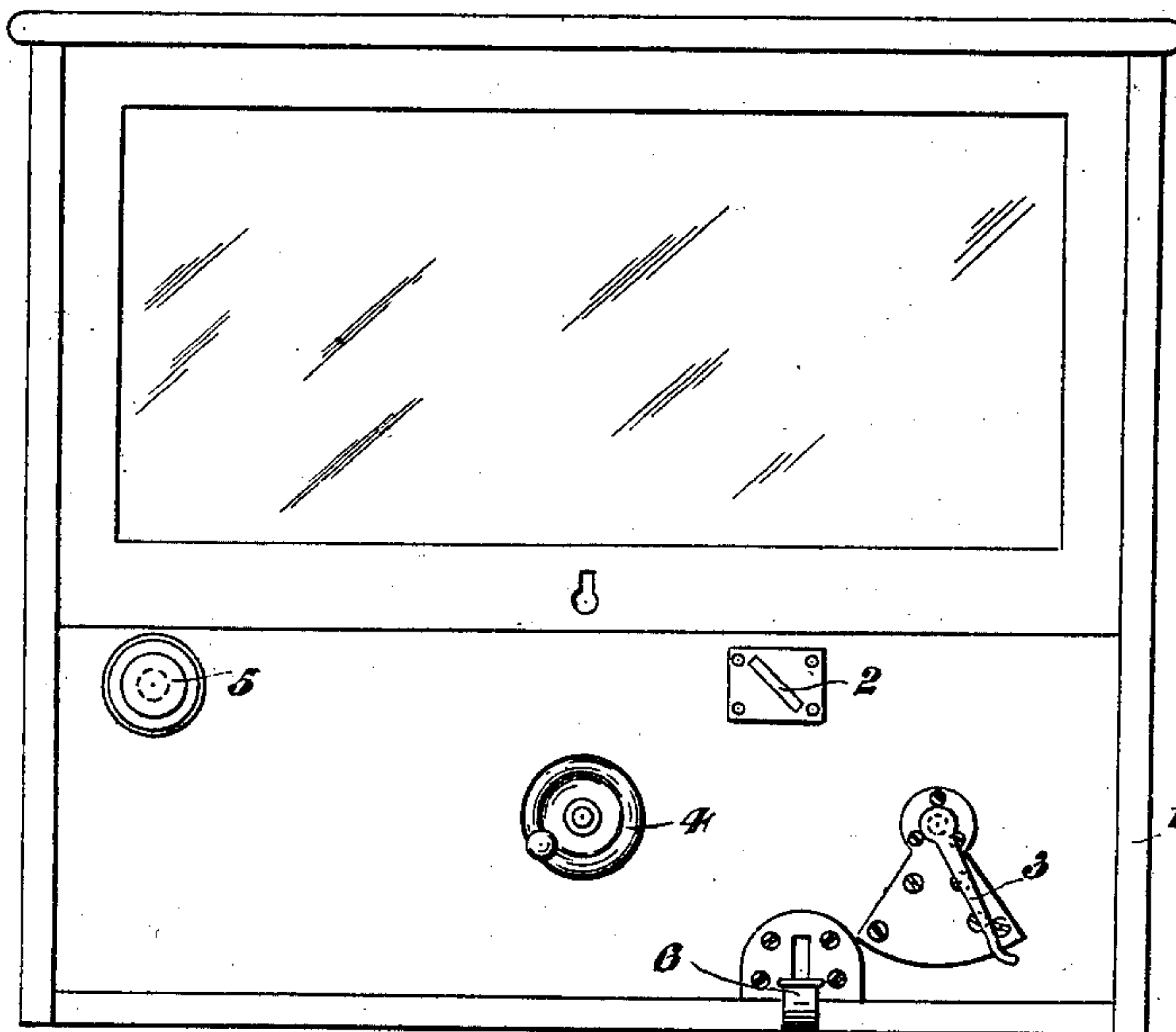


Fig. 1.

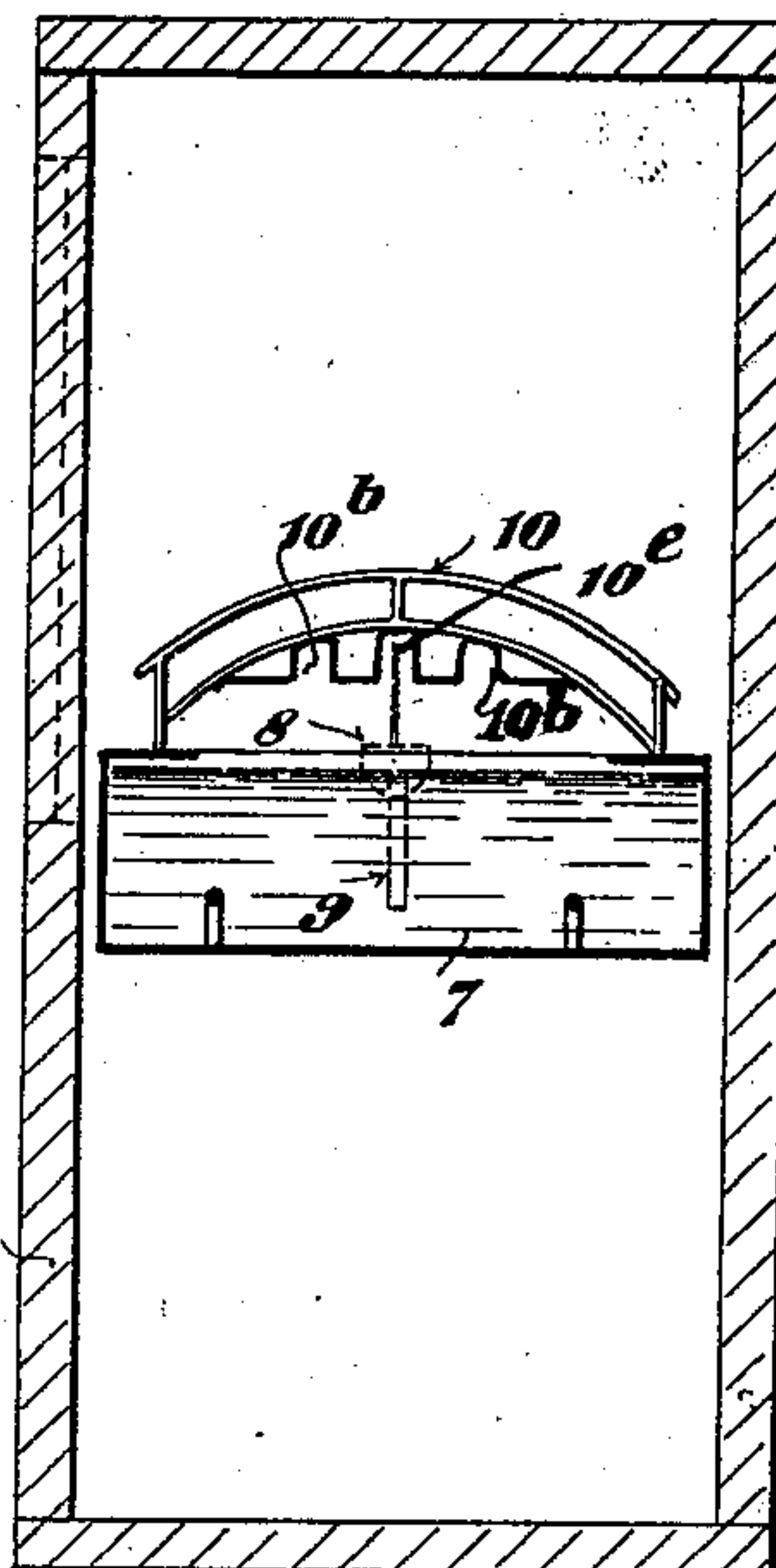


Fig. 7.

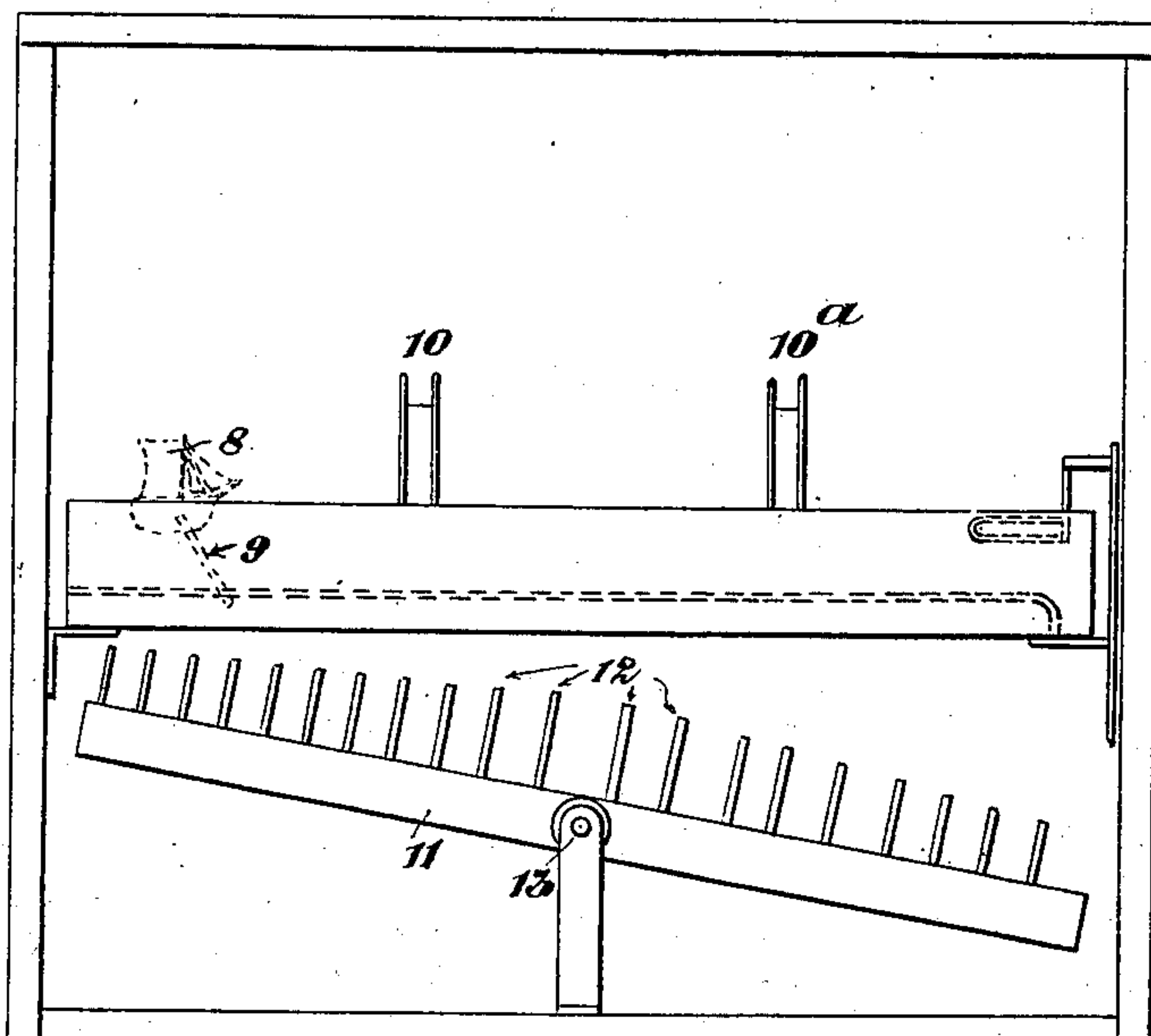


Fig. 2.

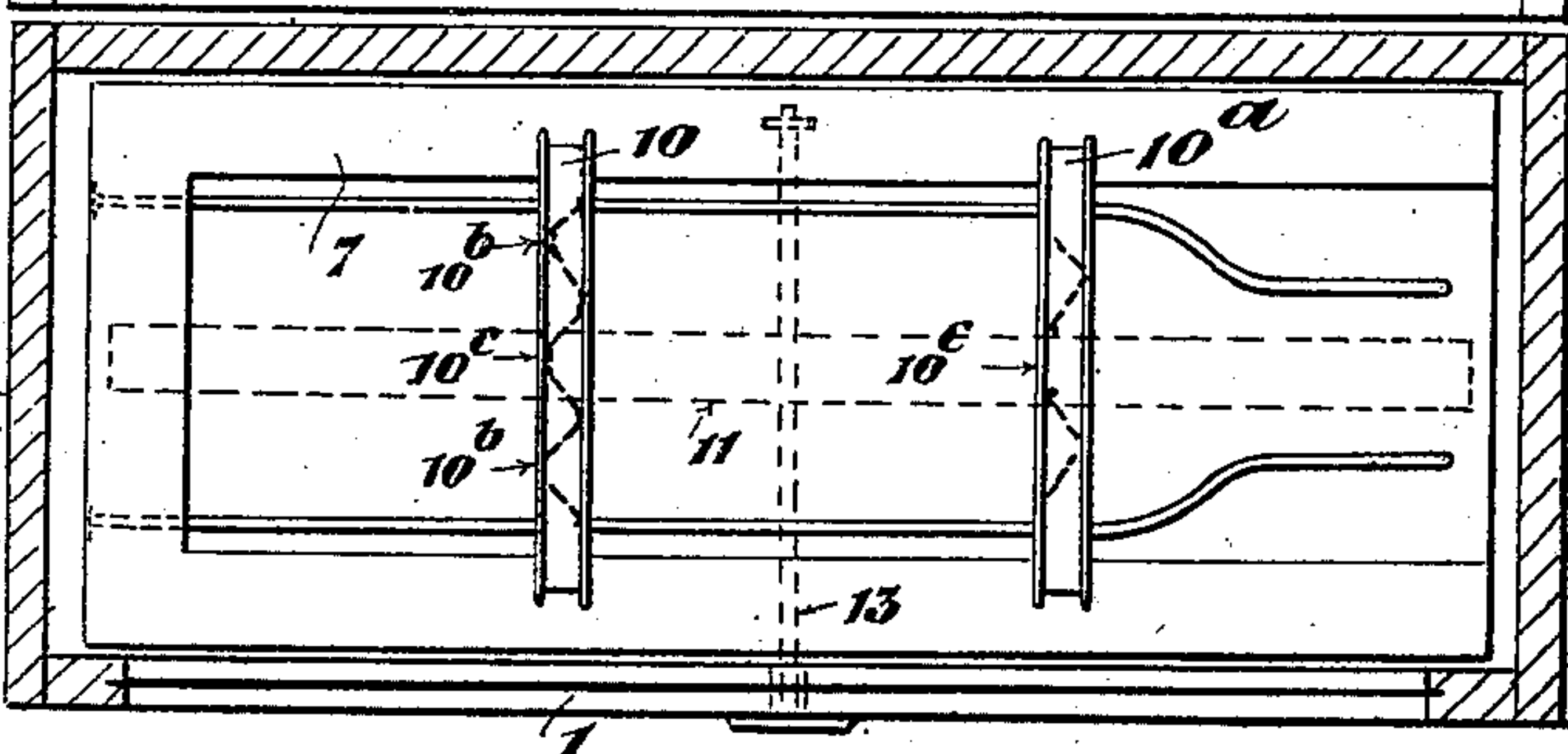


Fig. 3.

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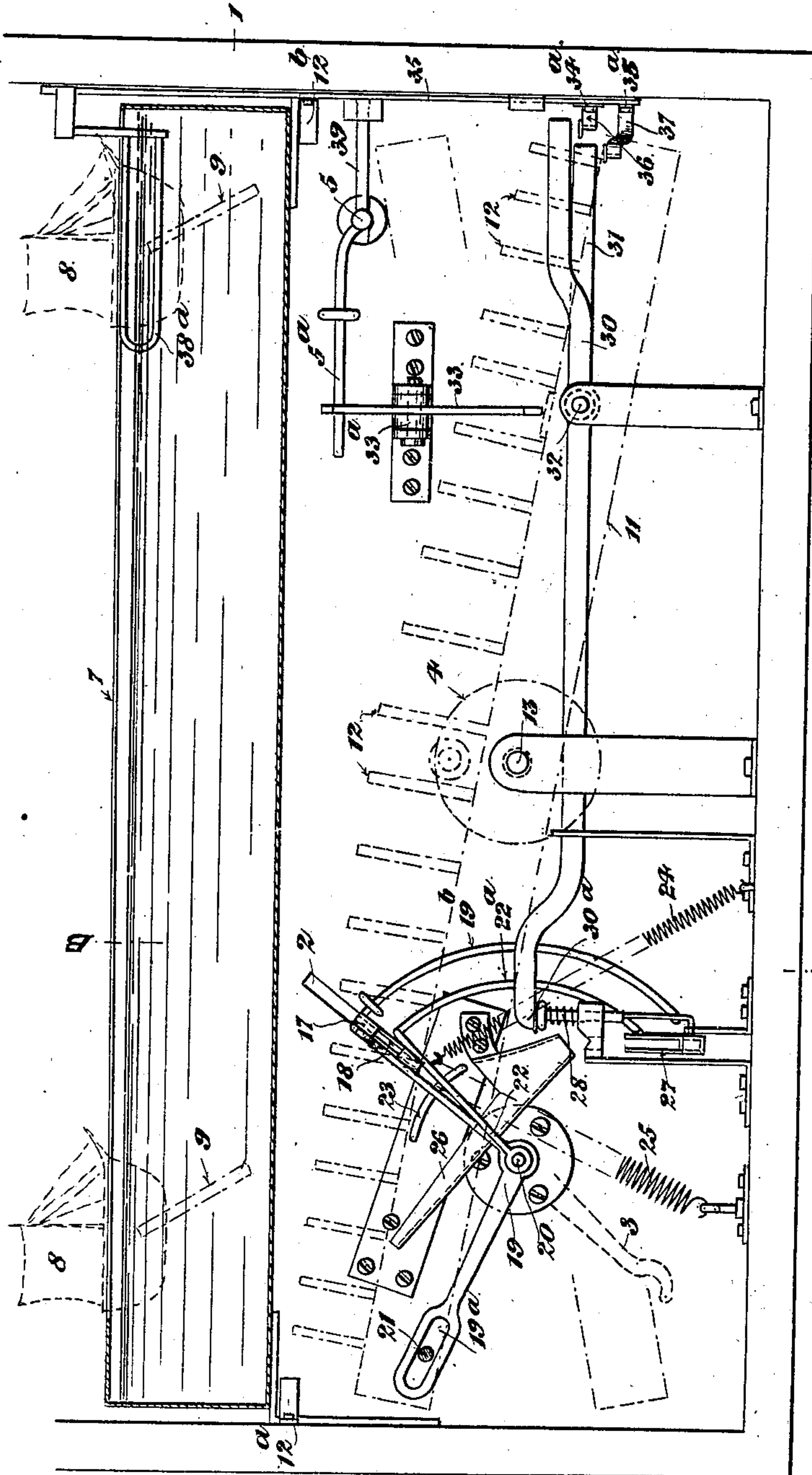
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3 Sheets—Sheet 2.

Fig. 5.



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3 Sheets—Sheet 3.

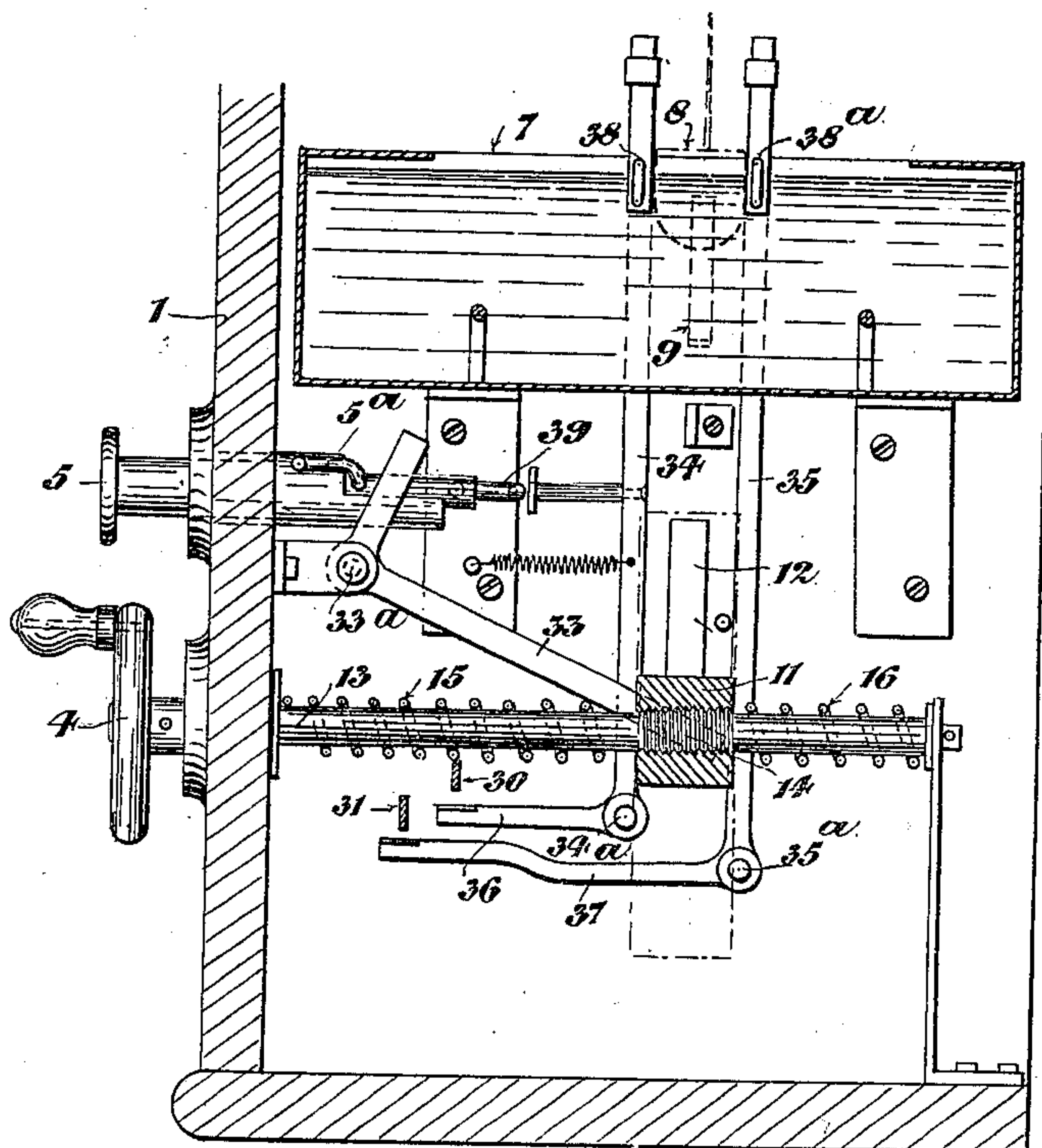


Fig. 7.

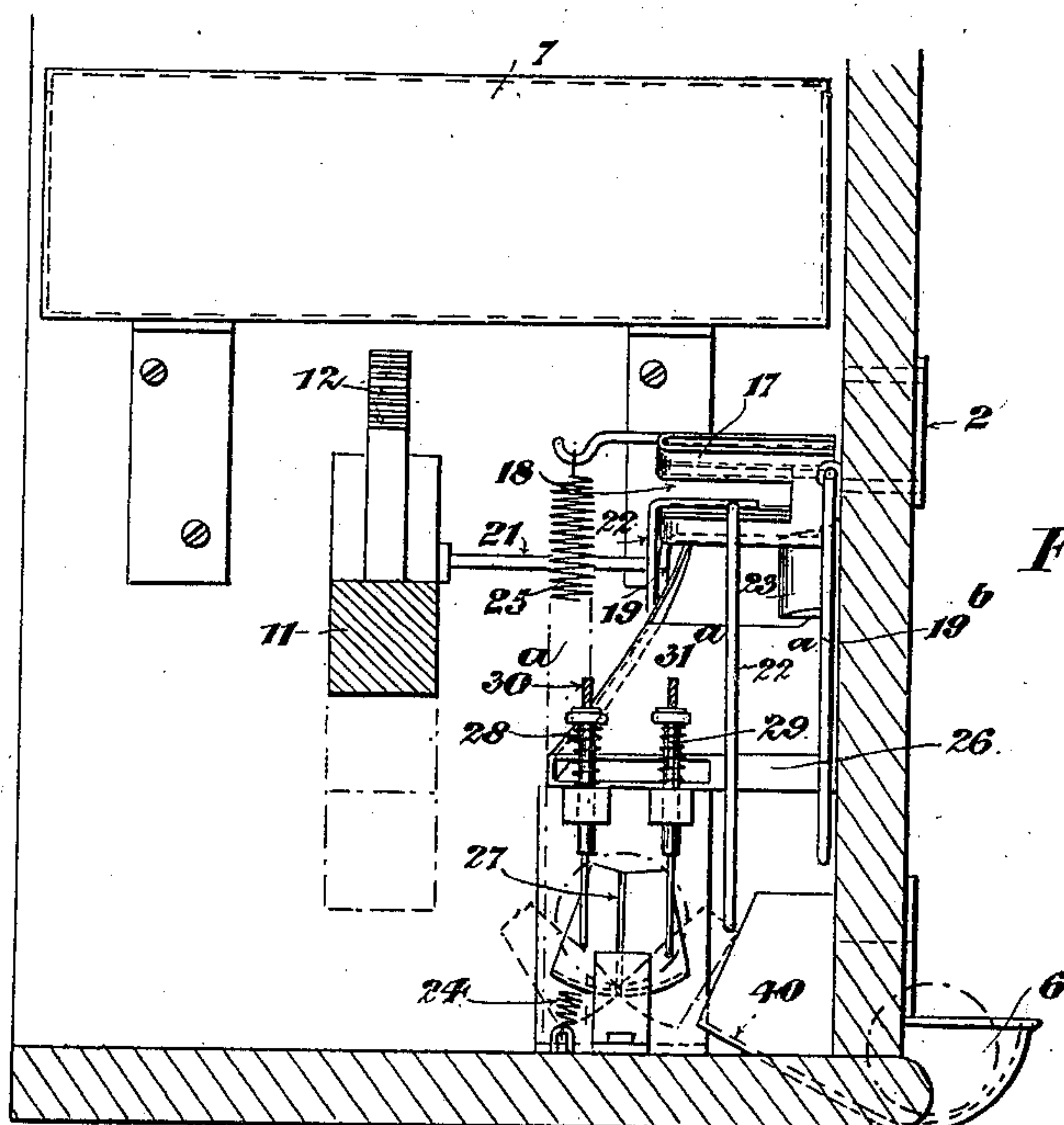


Fig. 6.

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UNITED STATES PATENT OFFICE.

ROBERT ERNEST WICKES, OF LONDON, ENGLAND.

GAME.

SPECIFICATION forming part of Letters Patent No. 658,197, dated September 18, 1900.

Application filed August 3, 1899. Serial No. 726,049. (No model.)

To all whom it may concern:

Be it known that I, ROBERT ERNEST WICKES, a subject of the Queen of Great Britain and Ireland, residing at 39 De Crespigny Park, Denmark Hill, London, in the county of Surrey, England, have invented a new or Improved Game and Apparatus Therefor, of which the following is a specification.

This invention relates to a new or improved (and preferably coin-freed) game and apparatus therefor; and it consists in providing in a suitable case a tank containing water or other liquid, imitation rocks, islands, or other obstructions being provided in various positions in or about the tank. A model boat or ship is provided, preferably mounted on a float or buoy, a magnet (or an armature-piece, of steel or other suitable metal) being attached to said boat, (or to the float or buoy,) and the game is to steer, by the means hereinafter described, the boat or ship from one end of the tank to the other without touching any of the rocks or obstructions, and if this is successfully accomplished the operator receives his penny (or other coin) back again, but if not the coin is retained in the apparatus. In lieu of receiving the coin back again a prize might be delivered—for instance, a cigarette.

Below the above-mentioned water-tank is a rocking bar carrying one or more rows of magnets, the exact arrangement of which magnets on said rocking bar may be varied as desired. The object of these magnets is to move the boat or ship forward, and the rocking bar carrying the magnets is capable of lateral movement by means of a handle outside the apparatus-case in order to allow of the operator steering the boat clear of the obstructions, and this lateral movement is preferably effected by means of a screw-thread on the shaft or spindle on which said bar is mounted. When the boat or ship is at its starting-point, the rocking bar with magnets is tilted so that the magnets at one end are in their nearest position to the bottom of the tank, and when the operator places a penny (or other coin) in the apparatus he is enabled, by means of a lever or handle outside the apparatus-case, to tilt said rocking bar, so that its other end is brought up near the bottom of the tank, and when this has been done the boat moves forward and, as before mentioned, if the oper-

ator succeeds in steering the boat from one end of the tank to the other he can receive back his coin by operating a suitable handle or knob, the operation of said handle or knob also returning the rocking bar to its former or normal position, so that the boat will be drawn back to its starting-point. If the boat fouls any of the obstructions and does not complete the course, the operation of said handle or knob delivers the coin into the apparatus, as hereinafter described:

If it is desired that the boat should turn around when it reaches the end of its course, it is necessary to provide a magnet on the boat, (or on the float or buoy,) said magnet being so arranged that its poles are not in vertical line with one another.

I also provide a fixed magnet or magnets attached to each end of the apparatus-case, either just below the water-tank or on a level therewith, said fixed magnets being so arranged with relation to the magnet on the boat or float that their near poles to the boat are opposite poles to the adjacent pole of the magnet on the boat. These fixed magnets are for the purpose of giving the boat an initial movement (or assisting its starting) from either end of the tank when the rocking bar with magnets is tilted, as hereinafter described.

Any suitable form of coin-controlled mechanism may be employed in connection with my invention; but I prefer to employ the mechanism hereinafter described.

In order that my invention may be better understood and more readily carried into effect, I will now describe it with reference to the accompanying drawings, in which—

Figure 1 is a front view of the apparatus-case, showing the lever for starting the game on the insertion of a coin, the steering handle or wheel, and the knob for discharging the coin and returning the rocking bar with magnets to normal position. Fig. 2 is a back view of my invention with the back of the case or framework removed, showing the rocking bar with magnets, the water-tank with bridges, and the boat with magnet or armature-piece attached. Fig. 3 is a plan of the tank, showing the bridges with obstructions and guiding-rails near the bottom of the tank for keeping the boat clear of the sides of the

tank, the bar supporting the magnets below the tank being shown in dotted lines. Fig. 4 is a cross-section of the apparatus, showing one form of obstruction consisting of bridges with projecting rails on the under side and narrow passages through which the mast of the boat must pass in order to complete the course from one end of the tank to the other. Fig. 5 is a back view of my invention, the back of the case being removed, showing details of the coin mechanism, the rocking bar with magnets being shown dotted in order to clearly show the coin mechanism which in this view is behind said bar, the position of the bar with relation to the coin mechanism being shown in full lines in Figs. 6 and 7. Fig. 6 is a vertical cross-section of Fig. 5 on line A B looking to the left. Fig. 7 is a vertical cross-section of Fig. 5 on center line looking to the right, showing the screwed shaft on which the rocking bar with magnets is mounted and the steering wheel or handle on the end of said shaft outside the apparatus-case, also the plunger or knob for discharging the coin, as hereinafter described.

The same numbers refer to the same parts in the several figures of the drawings.

Referring to Fig. 1, which illustrates the front of the apparatus-case 1, 2 is the slot for the insertion of the coin, 3 the lever or handle which tilts (through the medium of the coin) the rocking bar with magnets. 4 is the steering wheel or handle, and 5 the plunger or knob for discharging the coin either into the pocket 6 outside the apparatus-case or onto the bottom of the case, as described later.

7, Fig. 2, is the water-tank, and 8 the boat, (preferably mounted on a float,) having the magnet (or a plain steel bar) 9 attached.

10 10^a are the bridges with obstructions on their under sides, as shown in Figs. 3 and 4, with passages 10^b 10^c, through which the mast of the boat must pass in order to complete the journey from one end of the tank to the other.

11 is the rocking bar provided with one or more rows of magnets 12, said bar and magnets being preferably so arranged that the magnets can be adjusted as to distance from each other and height.

12^a and 12^b are the fixed magnets at each end of the apparatus-case. The bar 11 is pivotally mounted on the shaft 13, a portion of said shaft being provided with a screw-thread 14, Fig. 7.

15 and 16 are springs on the shaft 13 for the purpose of keeping the bar 11 in gear with the screw-thread on shaft 13.

Referring to Figs. 5, 6, and 7, 17 is a pocket or receptacle (with cut-away portion or passage 18) on one arm of a bell-crank lever 19, loosely mounted on spindle 20, the other arm of said lever having a slotted end 19^a, which engages a pin or projection 21 on the rocking bar 11. On the same center or spindle 20 is keyed another lever or arm 22, the handle 3, (shown in dotted lines,) outside the case, be-

ing fixed to the other end of said spindle 20. The levers 19 and 22 are provided with curved arms 19^b and 22^a, respectively, the arm 19^b preventing the insertion of a coin into the apparatus, said arm 19^b coming across the slot 2 when lever 19 has been operated through 3, as hereinafter described, so that a second coin cannot be inserted until the apparatus has been returned to the normal position.

23 is a shelf on which the edge of the coin in pocket 17 rests.

24 is a spring for returning the lever or arm 22 and handle 3 to the normal position; and 25 is a spring connected to lever 19 for retaining said lever in either of its positions of rest and also assisting the tilting of the bar 11.

26 is a coin-chute leading to a coin-receiving pocket 27, which is divided vertically, as clearly shown in Fig. 6, the two halves being pivoted at adjacent bottom corners and connected to spring-controlled plungers 28 and 29, respectively.

30 and 31 are long levers fulcrumed at 32, their ends 30^a and 31^a, respectively, bearing lightly on or being in position to engage plungers 28 and 29, respectively.

33 is an L-lever centered at 33^a and adapted to be operated by an arm 5^a, (see Figs. 5 and 7,) connected to the spring-controlled knob or plunger 5.

34 and 35 are vertical levers fulcrumed at 34^a and 35^a, respectively, Fig. 7, and provided, respectively, with short arms or tails 36 and 37, said levers being held in a normal vertical position by springs or counterbalance-weights and stops. The ends of the short arms 36 and 37 of levers 34 and 35 are when in the normal position a short distance below the levers 30 and 31, respectively. Levers 34 and 35, which extend slightly above the tank 7, are each provided with an attachment 38 and 38^a, which forms a kind of harbor or dock for the boat when it has completed the course from one end of the tank to the other, it being necessary, according to this construction, for the boat to get into position between said attachments 38 and 38^a, as shown at the right-hand end of Fig. 5, in order that the operator may be able to receive his coin back again.

39, Figs. 5 and 7, is an arm connected to the knob or plunger 5, said arm engaging and operating levers 34 and 35, as hereinafter described.

40, Fig. 6, is a chute leading to the coin-pocket 6 outside the apparatus-case.

The working of my invention is as follows: The normal or starting position of the boat 8 is, for example, at the left-hand end of tank 7, as shown in Figs. 2 and 5, (back views of the apparatus,) and the rocking bar 11 with magnets 12 is in the position shown in Fig. 2, with the magnets at the starting end of the tank in their nearest position to the bottom of said tank. The lever 3 outside the apparatus-case is always free to be operated, but is ineffective as regards the bar 11 until a coin has

been inserted. When it is desired to start the boat, a penny (or other coin) is inserted through the slot 2, Figs. 1 and 5, and drops into the pocket 17, Fig. 6, on one arm of lever 19, (the edge of the coin in pocket 17 resting on shelf 23, as above mentioned,) and on now moving the handle or lever 3, Fig. 1, from right to left the lever or arm 22, connected to 3 through spindle 20, is moved against the coin in pocket 17, and the lever 19 is thus carried over by 3 from left to right, (Fig. 5 being a back view, the movements would be seen in a reverse direction,) and the slotted end 19^a of the other arm of said lever 19 engaging the pin 21, projecting from the bar 11, said bar will be tilted so that the magnets at the other end will be brought up in proximity to the bottom of the tank 7. When the coin in the pocket 17 on lever 19, moving with said lever, reaches the end of shelf or ledge 23, it falls through the chute 26 into the divided receptacle 27 and remains there until discharged, as hereinafter described. The spring 25, connected to lever 19, assists the movement of said lever to either of its positions of rest. When the bar 11 with magnets 12 has been tilted, as described, the boat will move forward, owing to the attractive power of the magnets 12 acting on the magnet 9, (or steel bar,) attached to the boat. As before mentioned, a starting movement may be given to the boat by the magnet 12^a, owing to the adjacent poles of this magnet and the magnet on the boat being similar poles, and in order to steer the boat so that the mast will pass through the passages 10^b 10^c, below the bridges 10 10^a, the operator turns the wheel or handle 4, which revolves the shaft 13, thereby moving the bar 11 in a lateral direction, either away from or toward him, according to which direction the wheel or handle 4 is turned, and as the magnets 12 move with the bar 11 the boat will move either to the right or left, according to the direction of movement of said bar 11. If the operator succeeds in steering the boat clear of the obstructions on the bridges 10 10^a, so that it reaches the other end of the tank and gets into position between the attachments 38 and 38^a, Figs. 5 and 7, on the upper ends of levers 34 and 35, respectively, he can get his coin back again by pressing in the knob or plunger 5, which action operates levers 34 and 35, (movement being communicated to the latter through the boat 8,) and lever 35 being so arranged that its tail 37 will come in contact with and raise the end of lever 31 adjacent thereto before the tail 36 of lever 34 acts on the corresponding end of lever 30, the plunger 29 (see Fig. 6) will be depressed by the end 31^a of said lever 31, so that the outer or right-hand half of the divided coin-receptacle 27 will be tilted first, thus allowing the coin to roll through the chute 40 into the pocket 6 outside the apparatus-case. This action of pushing in the knob or plunger 5 also tilts the rocking bar 11 back to its normal position through the arm or extension 5^a,

Fig. 5, engaging the short arm of lever 33, the long arm of said lever 33 depressing the bar 11 and tilting it into its normal position, as shown in Fig. 2, and when this has taken place the boat will back out from between the attachments 38 38^a, (owing to the repelling action of the pole of magnet 12^b on the adjacent similar pole of magnet 9 on the boat,) and then turn around, through the action of magnets 12 on bar 11, and move back toward the starting-point at the other end of the tank. Should the operator be unsuccessful in steering the boat clear of the obstructions on the bridges, the operation of the plunger 5, as above described, will move the lever 34 far enough over so that its tail 36 will come in contact with the adjacent end of lever 30 before any movement of lever 35 can take place, owing to the absence of the boat from between the attachments 38 and 38^a on levers 34 and 35. Consequently the end 30^a, Figs. 5 and 6, of said lever 30 will depress the plunger 28, Fig. 6, and so tilt the left-hand or inner half of the coin-receptacle 27, so that the coin will fall onto the bottom of the apparatus-case.

It will be seen that according to the arrangements above described it is necessary for the boat to get into position between the attachments 38 and 38^a on levers 34 and 35, respectively, in order that the operator may receive back his coin, as above described.

On reference to Fig. 3 it will be seen that the obstructing rails (shown dotted) on the under side of the bridges 10 10^a are so arranged that when the bar 11 is tilted (by depressing the plunger or knob 5) to return the boat to the starting end of the tank it will not be necessary to operate the steering-wheel 4, as the mast of the boat can readily pass through the passages 10^b 10^c when moving in this direction.

As a modification in lieu of providing a tilting or rocking bar with magnets, as above described, I might employ a bar having only the lateral movements, (by the operation of handle 4,) in which case the magnets in the series would be of increasing strengths for the purpose of drawing the boat forward, or the boat might be propelled by clockwork or other suitable means, in which case the magnets in the series could be all the same strength.

As a further modification two or more bars with magnets might be provided and a corresponding number of boats and the game be to race the boats. Two or more wheels or handles could be arranged to be released on the insertion of a coin or coins, said handles being connected in any convenient manner to the respective bars, so that the operator who turns his handle the fastest, consequently tilting the corresponding bar faster than his competitors, would win the race.

Although I have herein described a navigation-game, yet it is obvious I may employ my apparatus for other games to which it may be applicable.

I do not herein claim the coin-controlled mechanism, as the same is fully described and claimed in a divisional application filed February 26, 1900, Serial No. 6,571.

5 Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a game apparatus, the combination, with a course provided with obstructions, a
10 movable object, and means for moving the object from one end of the course to the other; of a series of magnets arranged longitudinally of the course, and means for moving the said
15 magnets laterally of the course whereby the said object may be guided so as to pass the said obstructions, substantially as set forth.

2. In a game apparatus, the combination, with a course provided with obstructions, and
20 a movable object; of a pivoted bar provided with a series of magnets arranged longitudinally of the course and operating to move the

object longitudinally of the course according to the direction in which the said bar is tilted, and means for moving the said bar laterally whereby the said object may be guided so as
25 to pass the obstructions, substantially as set forth.

3. In a game apparatus, the combination, with a course provided with obstructions, and a movable object; of a steering-screw jour-
30 naled transversely of the said course, and a bar provided with a series of magnets arranged longitudinally of the course, said bar being pivoted on the said screw and being
35 moved laterally when the screw is revolved so as to guide the object past the said obstructions, substantially as set forth.

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Witnesses:

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