

(No Model.)

A. W. FALL.
GAME APPARATUS.

No. 571,997.

Patented Nov. 24, 1896.

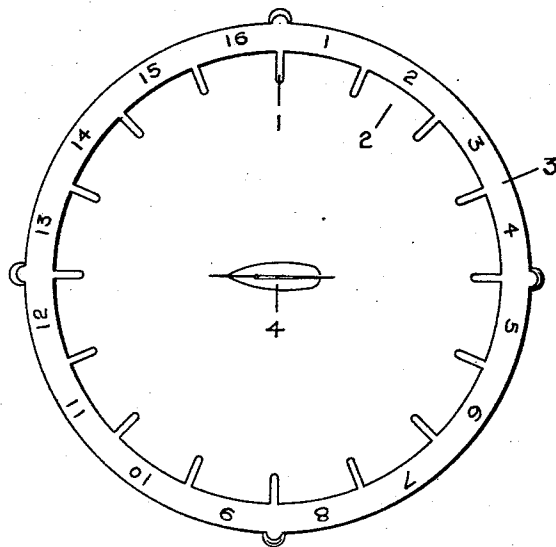


Fig. 1.

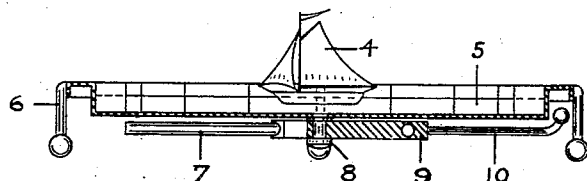


Fig. 2.

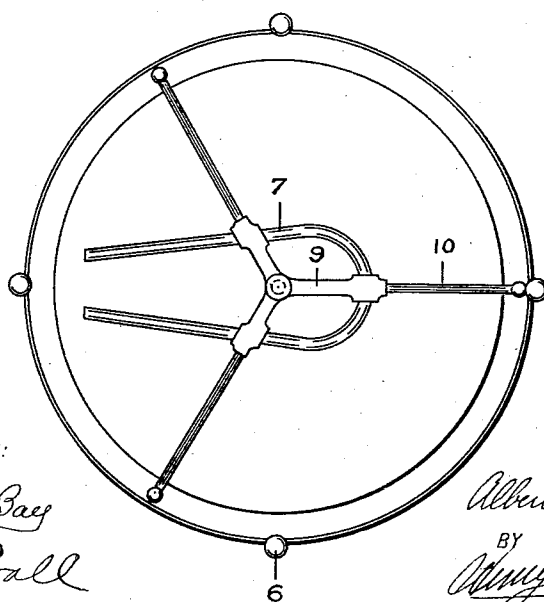


Fig. 3.

WITNESSES:

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GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 571,997, dated November 24, 1896.

Application filed January 7, 1896. Serial No. 574,612. (No model.)

To all whom it may concern:

Be it known that I, ALBERT W. FALL, a citizen of the United States, residing at Hoboken, State of New Jersey, have invented a new and useful Game Apparatus, of which the following is a specification.

My invention relates to an improvement in games in which magnetic force is used as the power for producing the motion.

By referring to the drawings it will be seen that Figure 1 shows a top view of the game apparatus. Fig. 2 shows a sectional view of the apparatus. Fig. 3 is a view of the apparatus looking at the under side of the same. Similar figures refer to similar parts throughout the several views.

Referring to the drawings, it will be seen that this apparatus is similar in some respects to the game apparatus for which Letters Patent No. 550,070 were granted me November 19, 1895, in which I used a catch which engaged at times with a toothed wheel, causing the magnets to rotate and then stop at places which cannot be predetermined by the persons playing the game. In my present construction I do away with this toothed wheel and catch and simplify the construction of the apparatus so that the magnet can be rotated by the finger of the operator striking a part which is part of or directly attached to the magnet itself without the interpolation of any other moving parts, as in the patent already issued to me. In my former Letters Patent referred to I also employed two magnets, and in the specification thereof the statement is made that "any number" of magnets could be employed, but up to that time I had not fully appreciated nor realized the advantage of a single magnet of increased size over two or more magnets, but there are very marked advantages, and it will be understood, therefore, that the present invention is also intended to cover a single magnet, combined with the particular devices by which the same is supported and operated, substantially as will hereinafter be more fully described.

This device consists, essentially, of a receptacle 3 for holding water 5. A small boat 4 floats on this water 5, and a magnet 7, which is located immediately below the receptacle 3 causes the boat 4 to float to places to the periphery of the receptacle. This motion is

accomplished by the peculiar location and shape of the magnet, which, it will be seen, is of the horseshoe type and which is pivoted at the center 8 of the receptacle 3. By dispensing with the operating devices of my former patent and using this single magnet instead of two magnets I am enabled to obtain a magnetic field of increased extent for apparatus of given sizes, since the magnet is larger and is of length about equal to the full radius of the water-receptacle, although to strike an equipoise or balance the loop or bend in the magnet is made to extend to one side of the center of gravity of the apparatus, while the polar ends extend to the other side. As hereinafter more fully described, the magnet thus arranged is supported at several different points lying in proximity to the axis of rotation thereof, by which means I obtain a very strong yet simple means of support therefor. In addition to obtaining a magnetic field of increased range or extent there is also the advantage with a single magnet that as soon as the same comes to a stop the float is sure to be caused to move in the direction of some one of the docks 2, whereas when two or more magnets are used it might sometimes happen that due to the fact of the magnetic fields being of equal intensity no appreciable movement of the float would take place, owing to the counterforce produced.

The polar ends of the magnet 7 are located near the periphery of the receptacle and the bend of the magnet is near the center of the receptacle. This causes a magnetic field of increasing intensity from the center to the periphery. The boat 4 has at its bow a piece of iron or magnetizable metal, and therefore when placed in the water 5 at the center of the receptacle it will be caused to float in the water in the direction in which the lines of force are increasing, or, in other words, to a locus immediately above the free polar ends of the magnet 7.

It will be noticed in Fig. 1 that I have numerous projections 1 extending from the edge or rim of the device, which form docks 2, into which the said boat is drawn, as described above. By giving different numbers or names to these docks 2, as shown in Fig. 1, it will be seen at once that we then have a game which is extremely interesting as well as instructive.

In the construction shown I hold the magnet 7 in a three-armed part 9, which also forms part of the bearing for the moving parts, and also forms means for holding the arms 10.

5 These arms 10 extend radially from the part 9 to the outer edge of the receptacle, as shown in Figs. 2 and 3. The receptacle 3 is held above the table or other place of support by means of legs 6, which hold it sufficiently high
10 from its place of support, so as to allow free rotation of the magnet 7, tripod 9, and arms 10.

The manner in which the game is played is as follows: The boat 4 is placed in the center of the sheet of water 5. The magnet is then
15 caused to rotate by the player striking one of the arms 10 at the edge of the device. When the magnet comes to rest, the boat is attracted into one of the docks, dependent upon the position of the magnet when at rest.

20 By using a very strong magnet it is possible to make the boat 4 travel in almost any direction from any starting-point, but by placing the boat 4 at the center of the sheet of water and then rotating the magnet it has
25 little tendency to move, as the magnetic field is not concentrated at one place until the magnet comes to rest.

By using several arms 10 it is seen that it is quite convenient for a number of persons
30 sitting around the table to rotate the magnet,

as one of the several arms 10 would generally be in a position to be tapped by the finger of the player.

It is not my intention to be restricted to the precise construction shown, as it is readily
35 seen that the receptacle as well as the magnet can be held in their respective places by numerous ways.

Having described my invention so that any one skilled in the art to which it pertains
40 can make the same, what I claim as my invention, and what I wish to secure by Letters Patent, is—

A game apparatus comprising a water-receptacle, and a float constituted in part of
45 magnetizable material, a single rotating magnet substantially equal in length to the radius of the receptacle, and pivoted to the under side of said receptacle at a point intermediate
50 the bend in the magnet and the polar ends thereof, a number of movable supports for said magnet lying at different points about its axis of rotation, a central bearing for said supports, and radial arms extending from
55 said supports to the edge of the water-receptacle, substantially as described.

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Witnesses:

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