March 31, 1936. C. A. PHILIPPI 2,036,076

TOY OR GAME

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Fig. 1.

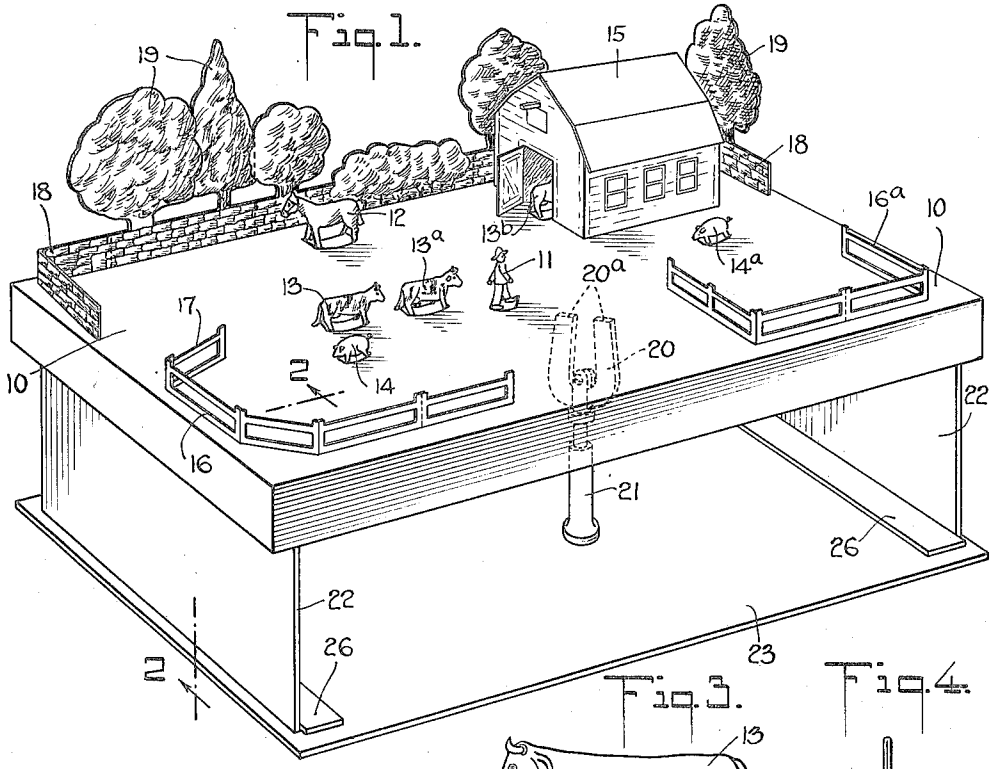


Fig. 2.

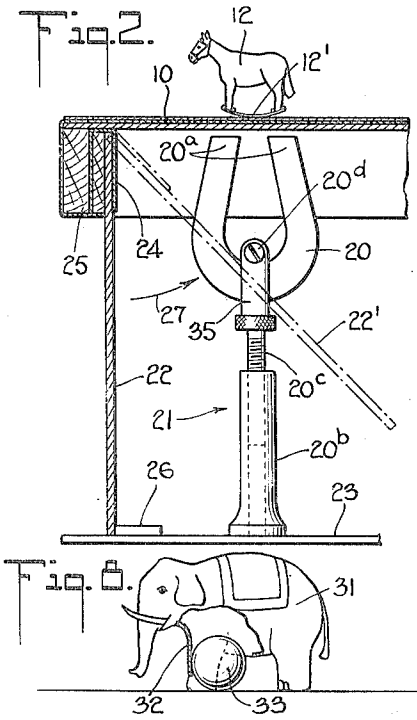


Fig. 3.

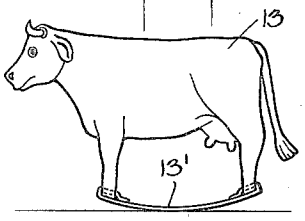


Fig. 4.

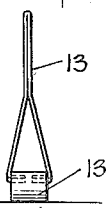


Fig. 5.

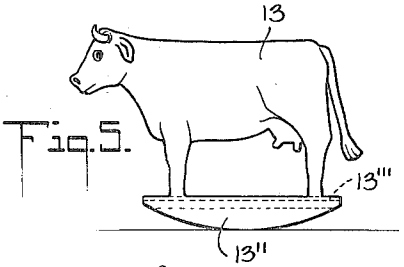


Fig. 6.

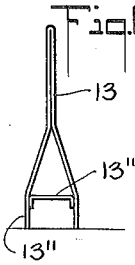


Fig. 7.

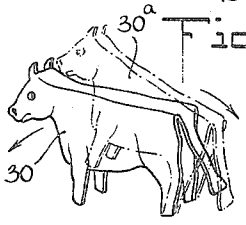


Fig. 8.

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Fig. 9.

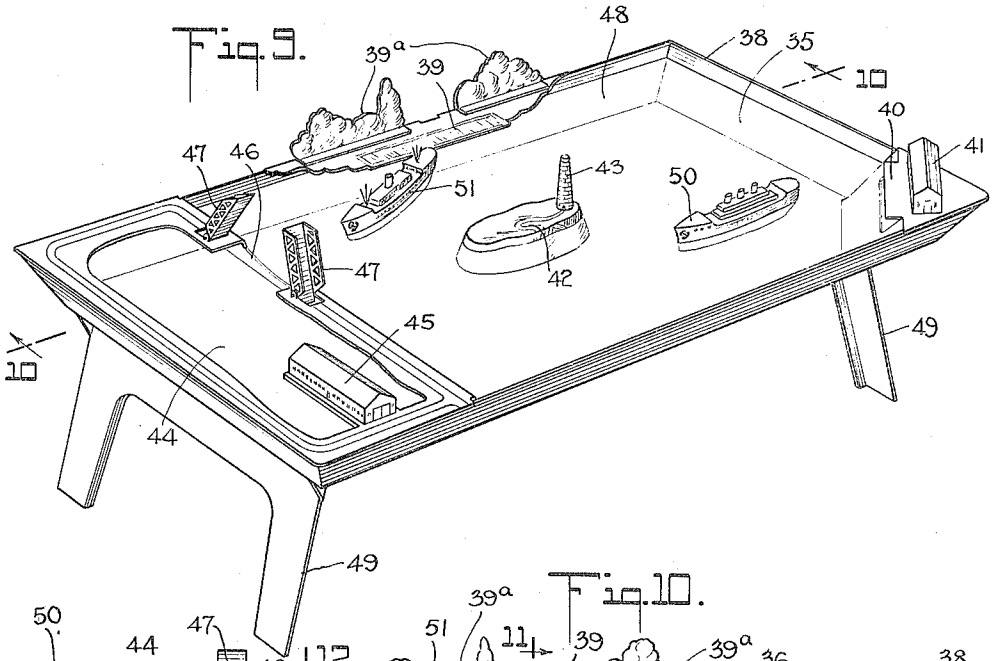


Fig. 10.

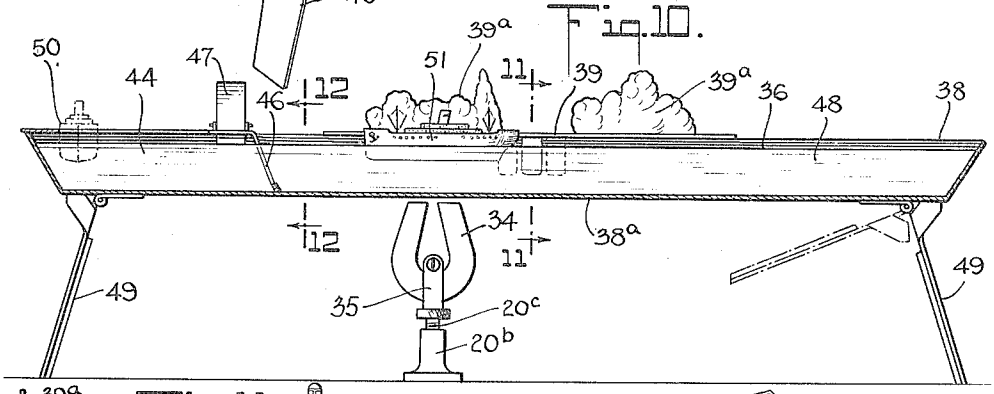


Fig. 11.

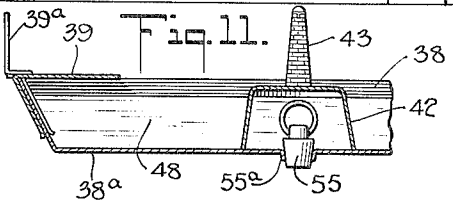


Fig. 12.

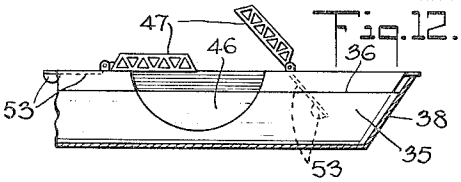


Fig. 13.

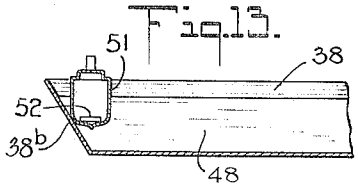
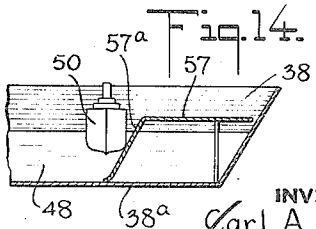


Fig. 14.



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UNITED STATES PATENT OFFICE

2,036,076

TOY OR GAME

Carl A. Philippi, New York, N. Y.

Application September 22, 1934, Serial No. 745,008

3 Claims. (Cl. 46—45)

My invention relates to a toy or game.

The preferred forms of my invention embody two types of elements simulating natural or other objects, one type being displaceable by magnetic means effected invisibly whereas another type of elements is unaffected by the magnetic means affecting the displacement of the first-named type, but preferably free to be displaced manually.

A simple application of my invention is had by the employment of suitable magnetic means, such as a permanent magnet, electromagnet, etc., the type of elements subject to displacement by such magnetic means embodying magnetic material, the type of elements not subject to magnet displacement being free of magnetic influence. The game is played by the interplay of the elements subject to magnetic movement and the elements not so subject. The game may be played in many varieties of embodiments of my invention. As a toy for children, my invention may take on the form of a farm scene, an aquatic scene, or a combination of these two forms.

An advantageous construction for elements such as those simulating animals, viz., a horse, a cow, a pig, etc., is had by imprinting the simulation on paper, which may be of single stock, or double stock, folded upon itself, desirably imprinted on opposite faces, the leg portions being connected to magnetic material or embodying magnetic material, thereby supporting the element.

Optimum realistice results are obtained by so forming the figure that oscillation or rocking takes place when the figure is moved by means of the hidden magnet. For the paper figure type having a magnetic base this result is readily accomplished by an arcuate configuration of the base, but such life-like movements can also be obtained by other constructions as will be apparent.

Further features and objects of the invention will be more fully understood from the following detail description and the accompanying drawings, in which

Fig. 1 is a perspective view of a complete game set up in condition for playing.

Fig. 2 is a sectional elevation on the line 2—2 of Fig. 1.

Fig. 3 is a side elevation and

Fig. 4 an end elevation of one form of movable figure employed showing the means forming part thereof for permitting rocking movement of the figure.

Fig. 5 is a side elevation and

Fig. 6 is an end elevation of another type of construction for figures employed in my game although similar to the animal shown in Fig. 3.

Fig. 7 is a perspective view of an all magnetic metal animal employed in playing my improved game, showing the oscillating action which results from a figure of this type.

Fig. 8 is a side elevation, partly in section, showing a still further form of animal which may be employed in my improved game. By means of the rolling steel ball a relatively large figure may be easily motivated.

Fig. 9 is a perspective view of my invention applied to an aquatic game in which actual water is used in which boats or other moving figures float.

Fig. 10 is a sectional end elevation on the line 10—10 of Fig. 9, showing the relationship between the tank, the magnet, the boat, the docks, and the water.

Fig. 11 is a sectional end elevation on the line 11—11 of Fig. 10 showing means for draining the tank at 55 and one method of fastening a harbor, etc. to the tank.

Fig. 12 is a sectional end elevation on the line 12—12 of Fig. 10 showing the mechanism of a lift bridge which can be motivated magnetically from below, or directly by hand.

Fig. 13 is a side elevation of one of the end sections of a tank such as is shown in Fig. 9 showing the slope of a side of the tank which prevents boats or other floating objects from adhering to the sides by surface tension; and

Fig. 14 is a sectional side elevation of a portion of a tank, such as is shown in Fig. 9, showing in section a pier construction and with a floating toy partially immersed in the fluid, within the tank and adjacent to the pier. This view also shows how piers, wharfs, etc. may be supported on the floor of the tank instead of fastening same to the sides of the tank, as in Fig. 11.

Referring to Figs. 1 through 6, illustrating a form of my invention as applied to a farmyard assembly, the surface 10 represents the ground on which are disposed two types of elements, one type of animate objects such as a farmer 11, a horse 12, a number of cows 13, 13a, 13b, a number of pigs 14, 14a, etc., and another type of inanimate objects, namely a barn 15, front fences 16, 16a, the latter being provided with a gate 17, and a rearward wall and group of trees; the wall being indicated at 18 and the respective trees at 19.

These inanimate objects are preferably free from the base and can be placed in arrangement to suit the will of the player but they can also

within the scope of my invention be permanently fastened to the playing surface **10**.

A magnet such as a horseshoe permanent magnet **20** serves as an effective means for invisibly effecting the movement of any selected of the stated elements representing animate objects relative to the stated objects representative of inanimate objects. For such purposes the magnet **20** is conveniently mounted in vertical position upon a stand **21**, which stand serves dually for grasping the magnet assembly and for readily positioning the magnet at any desired location.

Enhanced results are attained by effecting the positions of the poles **20***a*, i. e. the extremities of the magnet **20** closely adjacent as possible to the objects desired to be displaced but not actually touching the lower face of the playing floor **10**, and in the attainment of such purposes the stand **21** is formed to afford vertical adjustable mounting of the poles **20***a* with respect to the under face of the support **10**, as by the stand base **20***b*, see Fig. 2, and threading the member **20***c* received within such threaded bore or by other suitable means for raising or lowering the magnet. The magnet **20** may be removably secured in position in the forked end of the member **20***c*, as by means of a positioning screw **20***d*.

The surface **10** is preferably mounted to be elevated, as by means of oppositely disposed legs **22** of suitable material; the legs **22** may be hinged to the under face of the support **10**, as by means of a strip of cloth **24**, secured between wooden or other suitable strips. In such form of support, the legs **22** may be retained in position by stops **26**, affixed to a lower base **23**. Any other suitable form of collapsible support of the surface **10** may be employed, as for instance by removable legs inserted into holes in the wooden frame **25**, Fig. 2, such legs being similar to chair legs, only removable.

The form of mounting of the objects **11**, **12**, **13** etc. as shown in Figs. 2, 3 and 4, comprises an arcuate base of magnetic material, such as tinned sheet iron, see **12'**, Fig. 2, and **13'**, Figs. 3 and 4. The assembly of the body of the figure to such base is readily had by bending over edge portions of the base to clamp the "feet" portions of the respective figures.

In the type of embodiment shown in Figs. 5 and 6, the magnetic material is afforded by the bridging strip **13'''** while the rest of the animal is preferably non-magnetic, although the entire construction may be of magnetic metal. Under either method, a life-like rocking or walking motion is imparted to the figure when operated by the magnet.

In Fig. 7, the element **30**, in this instance representing a cow, may have its body, in whole or major portion thereof, of magnetic material, such as tinned sheet iron, suitably printed or otherwise suitably impressed to represent the animate object, a portion of such magnetic material, such as its tail extending toward the support **10**, but terminating a spaced distance therefrom whereby upon positioning the poles of the magnet in proper relation thereto, the element, see dot and dash outline, **30***a* is rocked or oscillated to impart animation.

In the embodiments as shown in Fig. 8, the body of the element **31** in this instance representing an elephant, may be of any suitable non-magnetic material, suitably imprinted, the body having a lowerly disposed recess **32** for receiving and freely retaining a ball **33** or equivalent of magnetic material, such as steel, which may be coated with nickel or other rust-preventing layer, the stated assembly upon coaction with the magnet **20**, or equivalent, be displaceable at the will of the player in the play of the game, the stated assembly partaking of a highly animated motion when in action.

Such type of my invention is of particular advantage in enabling a relatively large figure to be motivated by a relatively small ball or equivalent of magnetic material and a relatively small magnet.

Figs. 9 through 14 illustrate an aquatic type of my game, embodying for example, a tank constructed to contain water, and further elements provided with magnetic material and accordingly subject to displacement by magnetic cooperation with a magnet **34**, or equivalent in association with other elements non-displaceable by such influence but preferably displaceable manually.

In the embodiment illustrated in Figs. 9 through 14, the magnetically displaceable elements simulate passenger and cargo ships with which may be associated, as shown, an island, a lighthouse supported on such island, several harbors and piers. In the embodiment illustrated in these figures the water is shown divided into two bodies, a larger body in simulation of a bay or the like and a smaller body in simulation of a harbor.

It will be understood that the relative proportions and the configurations of the respective stated parts may be varied as desired and that floating objects other than ships, such as ducks, swans, bathers, etc. may be employed.

Specifically Figs. 9 through 14 illustrate a body of water **35**, the level of which is indicated at **36**, contained in a tank **38**, shown of rectangular configuration, the sides of the tank being preferably outwardly flaring, the purpose of which will be apparent hereinafter.

Thus, as shown in Figs. 9 and 10, I may associate two docks or piers **39**, **40**, preferably arranged to be manually positioned at any desired location, and desirably adjacent the rim at any side or sides of the tank. The group of trees indicated at **39***a* is preferably separate from the dock **39** and movable at will although it may also be made one with the land area. It is advantageous to partially support such docks by suspension from the tank rim. The inner face or faces of the side or sides of the tank may be marked by a line to indicate the desirable water level.

A wharf warehouse **41** is indicated for the dock **40** but may desirably be movable.

The island **42** may be supported directly upon the floor of the tank. The lighthouse **43** is shown supported upon and movable on the island **42**.

The sub-division of the water area, to provide a harbor **44**, and enclosed dock **45**, may be had by an appropriate dividing element, supported as shown from the rim at one end of the tank. Such dividing element may provide an inlet **46**, had by reducing the vertical height of the vertical member of the dividing element. Such inlet may be provided with a lift bridge **47**, serving as a draw, to be opened and closed to afford passage of a liner or cargo ship or other floating object through the inlet **46**. Such division of the total body of water thus provides for the larger body of water **48** exterior of the harbor **44**.

In carrying out my game, the tank **38** is suitably elevated, as by means of the two sets of legs **49**, **49**, the magnetic device **34** being positioned under the bottom **38***a* of the tank, the height of the legs, **49**, **49**, being selected and/or the adjust-

ment of the magnetic device correspondingly made, to enable the magnetic device **34** to be received below the bottom **38***a* of the tank.

An alternate construction for elevating the tank is to have removable legs, one at each corner, inserted at will into holes or slots connected with the tank construction. These legs may be similar to the legs of a chair only removable.

In Figs. 9 and 10, are illustrated two magnetically movable elements indicative of any type of ship or other floating object respectively designated **50**, **51**. The body of each of such water craft may be made of wood or other suitable material, having appropriate configuration, with suitable painted indications to simulate the objects represented. Each such water craft further embodies magnetic material such as a strip of iron, see **52**, Fig. 13, at the keel or otherwise suitably attached to each such element, or it is possible to make the entire boat of magnetic metal in which case no additional strip of iron is needed.

Comparing Figs. 9 and 10, the play of the game is carried out by the proper displacement of the magnet assembly **34** relative to the liner **50**, to displace the liner from the main body **48** of water through the inlet **46** into the harbor **44**, the final position of the liner **50** being that indicated in dotted outline in Fig. 10. Fig. 10 further shows the magnetic device **34** in quiescent position and in magnetic influential relation with the liner **51**, preparatory for the desired movement of the same, or if desired, for "anchoring" the liner **51** at its indicated position.

Fig. 11 shows a stopper **55** serving as a plug for closing the opening **55***a* in the bottom **38***a* of the tank, **38**, such opening serving upon removal of the plug **55** for the discharge of the water therefrom, the island serving to conceal the plug. If desired, the water may be discharged from the tank by forming a lip or the like at an appropriate location of the rim of the tank, say, at the center of the rim at one end of the tank.

Fig. 12 shows further developments of the principles of my game, namely the provision of the members **53**, **53**, serving as counterweights for the two lift bridges **47**. Such counterweights **53** and/or members for connecting the same with the respective draw-bridge elements **47**, may be of or embodying magnetic material, adapted to be operated by the magnet from bridge-closing position of each or both of the draw-bridge members **47** to bridge-opening position. Each counterweight per se may be selected of a suitable mass to be retained in bridge opening position while under the influence of the magnetic device **35**, but upon removal of the magnetic device **34**, each bridge element **47** returns under gravity to its bridge-closing position.

Fig. 13 illustrates the advantage of forming one or more rims of the tank **38**, specifically an end rim **38***b* of outwardly sloping contour, thus minimizing the area of contact of any element and hence the cohesion, such as the water craft **51**, when brought into contact with such rim.

Fig. 14 shows an alternate construction of a dock **56** or other of the non-magnetic type of objects, of suitable sheet material adapted to rest directly upon the bottom **38***a* of the tank, the water front side **57***a* of such dock being advantageously of outwardly flaring formation to minimize "sticking" of an element such as a liner **50**, etc. when brought into physical contact therewith.

As appears from above, my invention relates to a highly life-like game or toy suitable for play either as a land or water game or as a combination of these two types.

For example, I contemplate to combine the land and water features by bordering the water tank, as illustrated, completely or in part with land areas which could in part resemble the farm scene as illustrated. In such inter-relation of the land and water types, the life-like play qualities of my invention are still further enhanced.

My invention in whatever form it may be embodied, provides a high degree of interest, and play, first in the arrangement of the non-magnetic types of objects, secondly, in the life-like motivation of the oscillating land figures and in the free movement of the ships or other water objects, and thirdly, in the infinite variety of interplay between the magnetic and non-magnetic types of play elements.

I claim:

1. In a game, the combination of a playing surface, a plurality of game elements disposed on the surface, certain of said game elements including magnetic material, certain others of same game elements being of a scenic nature and adapted to be manually movable on said surface, and a magnet assembly disposed beneath the playing surface, and movable manually to any point under the surface, whereby the game elements including magnetic material, may be moved about the playing surface and relative to the others of said game elements.

2. In a game, the combination of a playing surface of water in a shallow tank, magnetic means freely movable beneath the tank, and a plurality of aquatic game elements, certain of said game elements being floating elements and including magnetic material arranged in the lower portion of the game elements, to afford displacement of same on the surface of the water by movement of said magnet means, certain others of said aquatic game elements being of a scenic nature and immune from magnetic influence and movably supported on the tank bottom or sides, and relative to which the floating game elements are caused to move by the magnet means.

3. In a game, the combination of a playing surface of water in a shallow tank, an adjacent land playing surface, magnet means freely movable beneath the tank and the land surface, a plurality of floating game elements, magnetic material forming a part of each of said game elements, a plurality of land game elements, magnetic material forming a part of each of said land game elements, non-magnetic scenic elements manually movable in said tank, and other non-magnetic scenic elements manually movable on said land surface, and relative to which the magnetic elements are caused to move.

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