

No. 828,689.

PATENTED AUG. 14, 1906.

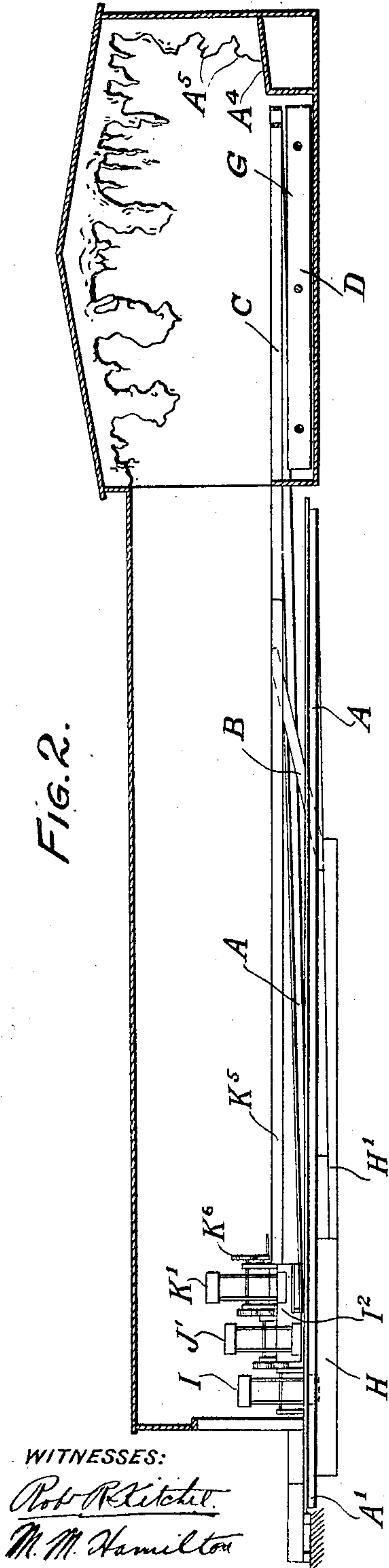
LA MARCUS A. THOMPSON.

AMUSEMENT APPARATUS.

APPLICATION FILED OCT. 7, 1905.

3 SHEETS—SHEET 2.

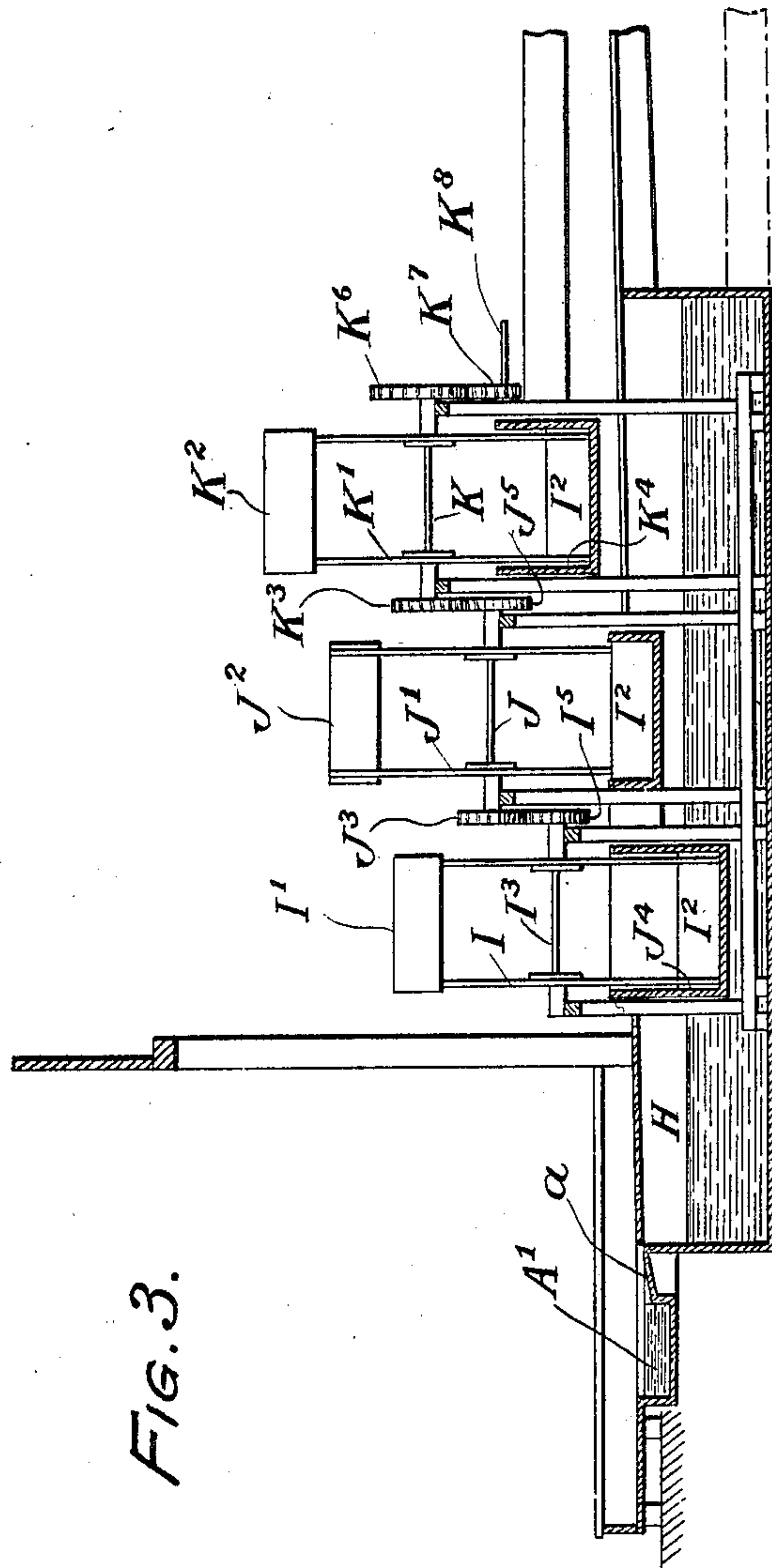
FIG. 2.



WITNESSES:

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FIG. 3.



INVENTOR

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3 SHEETS—SHEET 3.

Fig. 4.

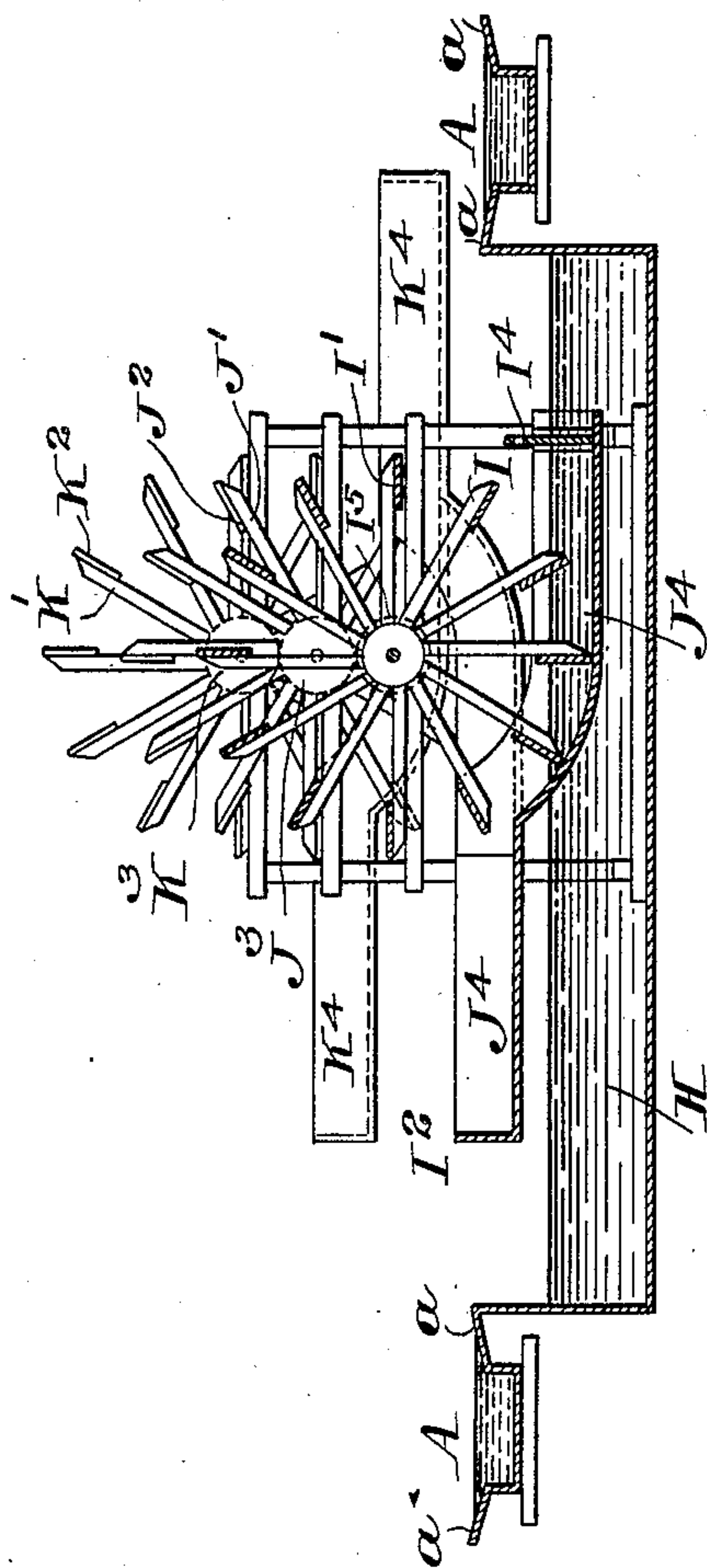
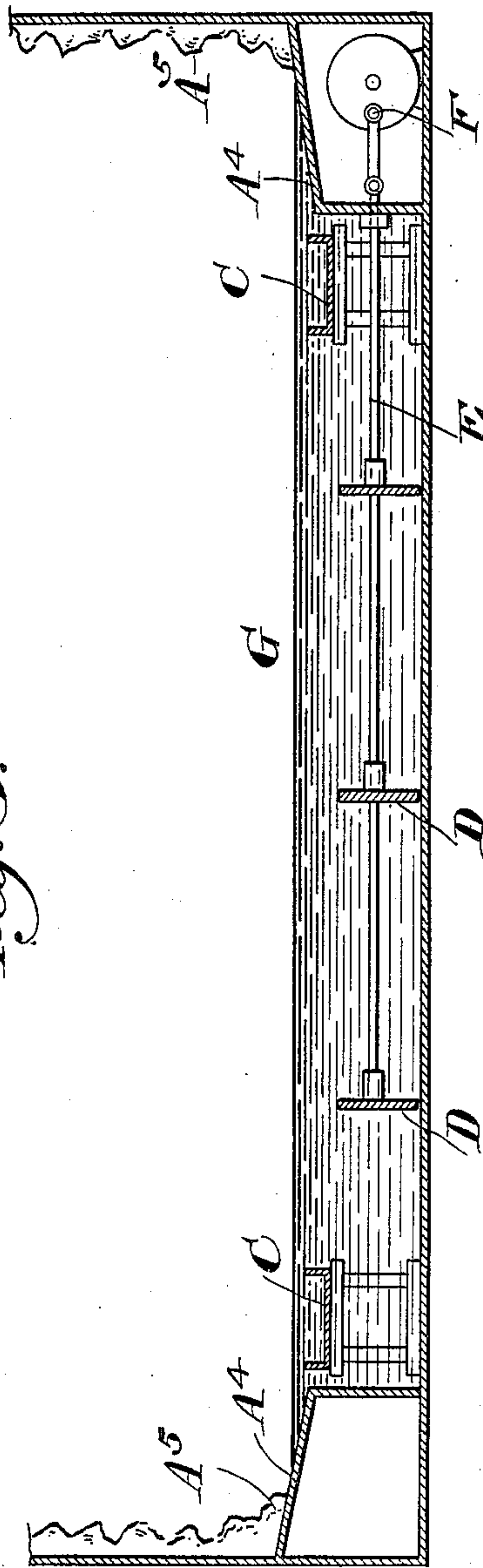


Fig. 5.



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UNITED STATES PATENT OFFICE.

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AMUSEMENT APPARATUS.

No. 828,689.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed October 7, 1905. Serial No. 281,781.

To all whom it may concern:

Be it known that I, LA MARCUS A. THOMPSON, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented a new and useful Improvement in Amusement Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

The object of my invention is the production of an amusement device of that class in which there is a canal or sluice containing water on which a boat containing the passengers floats and is guided by the walls of the sluice. This sluice in the devices of this character now in use has a high and a low point. The water flowing by gravity carries the boat with it. In this class of devices as now generally in use no provision is made to carry the boat while containing the passengers from one level to the other, and the water is carried by a single wheel from the lower to the higher level at the point of reception and removal of the passengers. This requires that the passengers see the transference of the boat, and also at that point the action of the stream of water is not continuous. Furthermore, in this class of apparatus the effect throughout is that of traveling or moving in a narrow passage-way. Finally, the lift of the water is but slight.

In my improved apparatus I provide or form the high point of the sluice beyond the point of reception of the passengers and automatically lift the boat and passengers from the low to the high point. By this arrangement the passengers on embarking proceed at once and there is no manual movement of the boats, nor are any of the lifting devices or mechanism in view of the spectators. Further, the boat and its passengers are lifted automatically from the low to the high point, so that from end to end the operation is automatic and continuous. I also provide a novel construction for lifting the water from the low to the high level, whereby it may be lifted to a higher plane than is now the case.

This construction, generally speaking, consists of a plurality of intergeared wheels hav-

ing blades. The wheels are arranged in position side by side and in altitude at different heights. These wheels are surrounded by a casing forming channels leading from the blades of each wheel to the next higher, so that each wheel forces the water to the next wheel, and so on until the desired height is reached, from whence a chute leads to the high point of the main channel or chute. I also have at the point or portion where the wheels are a pool to collect sufficient water, which pool connects by a chute or channel with the low point of the main channel or chute. Between this pool and the interior of the wheel-casing I provide a regulating-gate. I also form or use in my improved apparatus the following novel and pleasing feature. At one point the main chute is broadened out to form the contour of a lake or pond of water. The sides of this contour so formed are inclined to give the appearance of a shore-line, on which may be placed rocks and painted scenes of various character. Through this broadened-out portion continues a secondary chute or channel in continuance with and of the same width as the main channel in its narrow and normal portion. It, however, is of less height than the main channel, its top being below the level of the water, it extending upward from the bottom only a distance sufficiently to be above the bottom of the boat when unloaded, and thus still guide the boat. This auxiliary or secondary chute may extend through the lake in a sinuous course. When the boat passes from the main portion to this auxiliary portion, it has the effect of passing into an open lake, the guiding medium being hidden by the water. The effect at this point I heighten by causing the water in this portion to be agitated, thus forming waves which are perceptibly felt by those in the boat.

I will now describe the specific embodiment of my invention illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my improved device, showing the outline of the building in section. Fig. 2 is a side elevation with the outlines of the building in section. Fig. 3 is an enlarged longitudinal section of the front

portion of the device. Fig. 4 is an enlarged cross-section on 4 4, Fig. 1. Fig. 5 is an enlarged cross-section on 5 5, Fig. 1.

A is the main chute, which, with the exception of the portion A', is inclosed in a building. The chute A is of width sufficient to receive and guide the boats and has the inclined sides *a*. The portion A' is the point of reception and debarcation of the passengers. At a point beyond this starting-point is the high point A² of the main sluice or chute, and A³ is the low point. These points are connected by an inclined conveyer B. Intermediate between the high point A² and low point A³ the chute or channel A is broadened out to form a lake or pond G, having inclined walls A⁴, provided with scenic effects A⁵. In this lake or pond is the submerged chute or channel C, which forms a continuance of channel A and is of the same width, but of a lower height, being of such height that its top is below the surface of the water in the pond. In this pond is also the agitator D, which is connected by the rod E with the crank F, by the movement of which the agitator may be moved to form waves on the pond or lake. At the outlet of the lake or pond G is a regulating-gate G', which may be closed when the apparatus is not in use or opened to the desired extent when the apparatus is in use. From the outlet of the lake G the main channel A continues in a sinuous course to the point A³. Near the portion A' and in view of the spectators is the reservoir or pool H. A chute H' connects the low point A³ and the reservoir H. In this reservoir is the wheel I, having blades I', supported on shaft I³. Supported upon the shaft J at a higher level than shaft I³ is the wheel J', having blades J². Upon the shaft J is a gear J³, meshing with a gear I⁵ on shaft I³, the two gears being of same size. K is a shaft at a higher level than shaft J and, like it, supporting a wheel K', having blades K². The shaft K has a gear K³, which meshes with a gear J⁵ or shaft J. Partially surrounding these wheels is the case I². A gate I⁴ connects this case with the pool H. A channel J⁴ connects wheels I and J', and a channel K⁴ connects wheels J' and K'. From wheel K' a chute K⁵ leads to the high point A² of the channel A. The shaft K has also a gear K⁶, which meshes with a gear K⁷ on a shaft K⁸, which latter shaft may be driven in any appropriate manner.

As may be seen, the water is successively elevated by the three wheels to a considerable height and brought to a point at the top of conveyer B. The amount of water delivered may be regulated by the gate I⁴, while the pool or reservoir H forms a storage-place for any leakage in the system of chutes. Between the outlet of the lake and the low point A³ of the chute A rapids may be formed, as in

the manner shown in Patent No. 755,449, issued to me March 1, 1904. These rapids are denoted by the letter L. As may be seen, with this apparatus the riders start on the boat at once by gravity and are automatically drawn up the incline B, pass through the lake C, in which they have the sensation of free traveling, the guiding device or chute being submerged, and in which not only scenic effects may be shown, but by mechanically agitating the water the effect of waves and a storm may be produced, which effect may be heightened by producing artificial thunder and lightning. By making the sides of the chutes or channels A inclined I obtain the effect of a shore-line, giving water beyond the boat, thus appearing to float in free water without a channel. Further, by my improved arrangement of a plurality of lifting-wheels at different heights and such wheels intergeared the water may be lifted to a greater height, thus giving a larger or more rapid boat ride and admitting of the introduction of rapids, &c. Finally, by having the pool or reservoir H, I provide an appearance of a pool or lake in view of the spectators and a reservoir which will retain sufficient water at all times and form a place for the reception of any water of leakage.

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

1. In an amusement apparatus of the character described, in combination, a closed building having an open front, a sinuous main chute or channel, extending from said open space within said building, said main chute or channel containing water and adapted to receive and convey a boat, said channel having high and low points and an inclined conveyer adapted to receive and convey the boats connecting said points, a reservoir and a chute or channel, independent of the main chute or channel, connecting said reservoir and the low point of said main chute or channel.

2. In an amusement apparatus of the character described in combination, a closed building having an open front, a sinuous main chute or channel, extending from said open space within said building, said main chute or channel containing water and adapted to receive and guide a boat, said channel having high and low points and an inclined conveyer, adapted to receive and convey the boats, connecting said points, a reservoir and a chute or channel, independent of the main chute or channel, connecting said reservoir and the low point of said main chute or channel, a lifting-wheel in said reservoir and a chute or channel, independent of the main chute or channel, connecting said wheel and the high point of said main chute.

3. In an amusement apparatus of the char-

acter described, in combination, a closed building having an open front, a sinuous main chute or channel containing water, adapted to receive and guide a boat, extending from said open space within said building, said channel having high and low points and an inclined conveyer adapted to receive and convey the boats connecting said points, a reservoir, a plurality of intergeared lifting-wheels, said wheels being at different levels, the first wheel being in connection with the reservoir and water connection successively between the lowest wheel and highest wheel, and a chute or channel connecting the highest wheel and the high point of the main chute or channel.

4. In an apparatus of the character described, in combination, a plurality of intergeared lifting-wheels at different heights, water connection between the several wheels, a source of water-supply connection between said source of water-supply and the lowest wheel.

5. In an apparatus of the character described, in combination, a plurality of intergeared lifting-wheels at different heights, water connection between the several wheels, a source of water-supply connection between said source of water-supply and the lowest wheel, and a water channel or chute leading from the highest wheel.

6. In an apparatus of the character described, in combination, a main channel containing water, adapted to receive and guide a boat, the walls of said channel extending above the water, said main channel being broadened out to form a pool or lake, a secondary channel in said lake adapted to receive and guide a boat, the walls of said secondary channel being below the surface of the water, said secondary channel forming a continuation of the main channel.

7. In an apparatus of the character described, in combination, a main channel containing water, adapted to receive and guide a boat, the walls of said channel extending above the water, said main channel being broadened out to form a pool or lake, the walls forming said lake being inclined, a secondary channel in said lake adapted to receive and guide a boat, the walls of said secondary channel being below the surface of the water, said secondary channel forming a continuation of the main channel.

8. In an apparatus of the character described, in combination, a main channel containing water, adapted to receive and guide a boat, the walls of said channel extending above the water, said main channel being broadened out to form a pool or lake, the walls forming said lake being inclined and provided with scenic effects, a secondary channel in said lake adapted to receive and guide a boat, the walls of said secondary chan-

nel being below the surface of the water, said secondary channel forming a continuation of the main channel.

9. In an apparatus of the character described, in combination, a main channel, containing water, adapted to receive and guide a boat, the walls of said channel extending above the water, said main channel being broadened out to form a pool or lake, a secondary channel in said lake adapted to receive and guide a boat, the walls of said secondary channel being below the surface of the water, said secondary channel forming a continuation of the main channel, and means to agitate the water in said lake to form waves therein.

10. In an apparatus of the character described, in combination, an artificial lake or pool, a chute or channel therein, in which a boat is adapted to float and be guided by the walls thereof, the walls of said chute or channel being below the surface of the water in the lake or pool.

11. In an apparatus of the character described, in combination, an artificial lake or pool, the walls forming the shore of said lake being inclined, a chute or channel therein, in which a boat is adapted to float and be guided by the walls thereof, the walls of said chute or channel being below the surface of the water in the lake or pool.

12. In an apparatus of the character described, in combination, an artificial lake or pool, the walls forming the shore of said lake being inclined, and provided with scenic effects, a chute or channel therein, in which a boat is adapted to float and be guided by the walls thereof, the walls of said chute or channel being below the surface of the water in the lake or pool.

13. In an apparatus of the character described, in combination, an artificial lake or pool, a chute or channel therein, in which a boat is adapted to float and be guided by the walls thereof, the walls of said chute or channel being below the surface of the water in the lake or pool and means to agitate the water in said lake to form waves therein.

14. In an apparatus of the character described, in combination, a main channel containing water, adapted to receive and guide a boat, the walls of said channel extending above the water, said main channel being broadened out to form a pool or lake, a secondary channel in said lake adapted to receive and guide a boat, the walls of said secondary channel being below the surface of the water, said secondary channel forming a continuation of the main channel, and a gate at the outlet of said lake.

15. In an apparatus of the character described, a chute or channel containing water in which a boat is adapted to float, said channel having vertical sides between which the

boat is guided, said vertical sides terminating below the surface of the water.

16. In an apparatus of the character described, a chute or channel containing water, 5 having vertical sides between which the boat is guided, said vertical sides terminating below the surface of the water, and inclined extensions from said vertical sides.

In testimony of which invention I have hereunto set my hand, at city of New York, 10 on this 5th day of October, 1905.

LA MARCUS A. THOMPSON.

Witnesses:

J. A. MILLER,

HENRY BENOIT.