

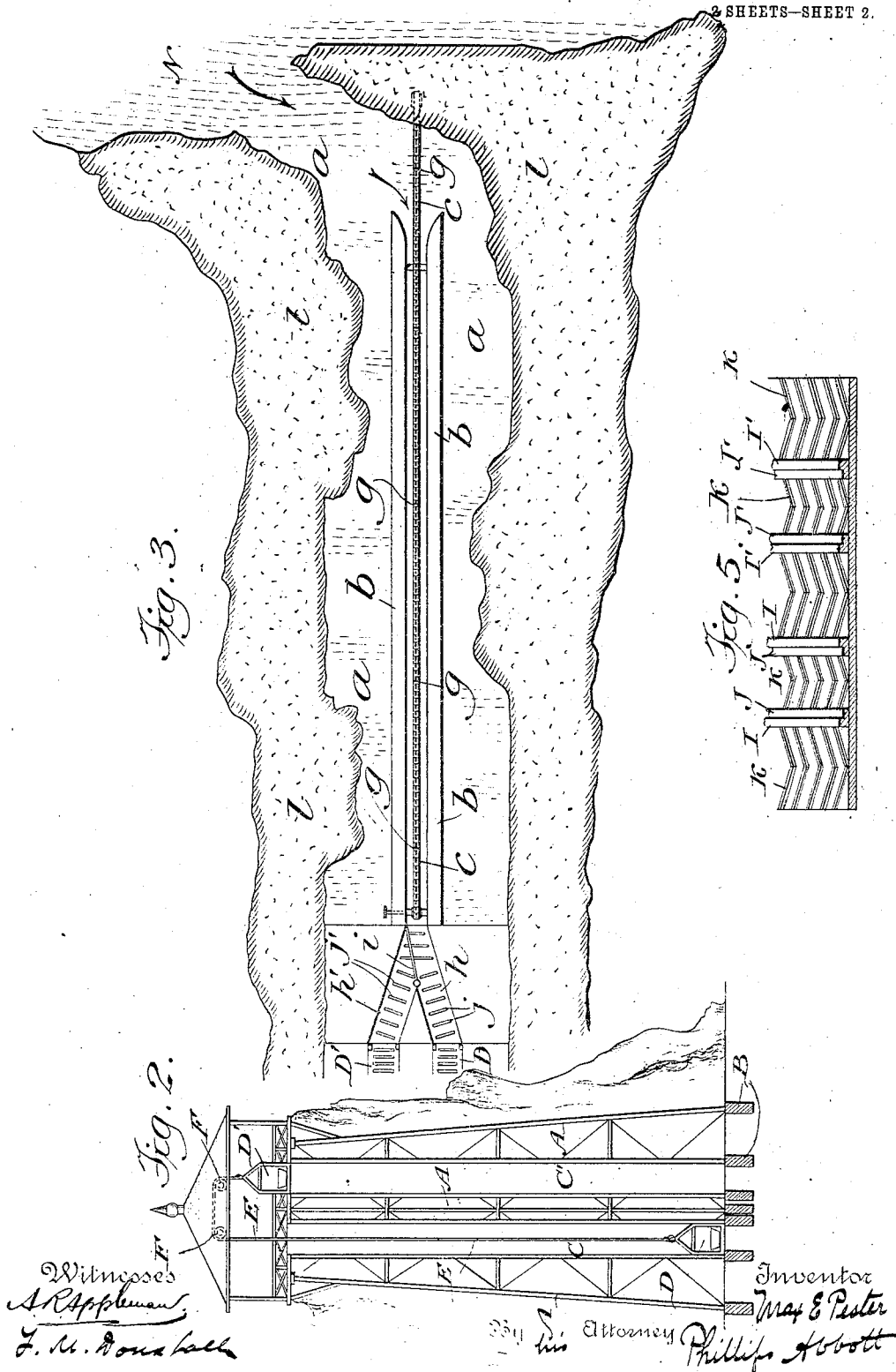
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PATENTED JUNE 26, 1906.

M. E. PESTER.
EXHIBITION AND AMUSEMENT APPARATUS.

APPLICATION FILED APR. 14, 1906.

2 SHEETS—SHEET 2.



UNITED STATES PATENT OFFICE.

MAX E. PESTER, OF GLEN COVE, NEW YORK.

EXHIBITION AND AMUSEMENT APPARATUS.

No. 824,436.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed April 14, 1906. Serial No. 311,660.

To all whom it may concern:

Be it known that I, MAX E. PESTER, a citizen of the United States, and a resident of Glen Cove, Nassau county, Long Island, New York, have invented a new and useful Exhibition and Amusement Apparatus, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 illustrates a vertical sectional view of the entire structure. Fig. 2 illustrates an elevation of the tower. Fig. 3 illustrates a plan view of the escalator. Fig. 4 illustrates a detail of the elevator and co-acting parts at the top of the tower. Fig. 5 illustrates a detail of the incline or slideways.

My structure embodies certain features which will be hereinafter described, whereby its capacity to handle passengers is very greatly increased as compared with any structure of the kind known to me and also certain effects or results not heretofore obtained are accomplished in a very satisfactory manner. The structural features embodied in the apparatus are, moreover, exceedingly simple and may be made of heavy construction. Hence there is great permanence and durability in the structure not only as a whole, but in all its parts. This is an important feature in apparatus of this class.

Referring now to the drawings, A is the tower of the apparatus, preferably made in two sections, as shown, supported upon suitable foundations B. The method and special construction is immaterial. It has two elevator-slideways C C'.

D D' illustrate the elevators. They are of sufficient capacity to receive and convey the boat and its load of people. They are or may be connected by a cable or chain E E, which passes over suitable rollers F at the upper part of the structure, and they are preferably so arranged that when one is ascending the other is descending, so as to effect the counterbalance.

G G' are the runways or slides down which the boat descends. They are or may be made of timber suitably supported upon a strongly-braced framework H, made in any preferred manner. It will be noted that the slideways instead of being straight or merely curved, as usual, are made wavy in my structure, whereby the descending boat receives a peculiar pitching motion resembling that of the waves.

Referring to Fig. 5, the two slideways of

the inclined runways are shown. Each slideway embodies two lateral beams I I, I' I', respectively, and two other beams J J, J' J', firmly spiked or bolted to the beams I I and I' I'. They are separated by a space about equal to the width of the bottom of the boat, and the beams J J, J' J' are set somewhat lower than the beams I I, I' I', so that the bottom of the boat will slide upon them and be prevented against lateral displacement by the beams I I, I' I'. All the bearing-surfaces of these slideways are or may be lubricated in any suitable manner, although they will ordinarily be more or less wet by the water which flows down over the slideways, so that in many instances lubrication will not be required. I prefer, in order that the illusion may be more perfect, to cover the entire face of the slideway-frames with a series of transverse slats, one form of which is illustrated at K K, over which the water will splash and ripple, thus simulating the surface of waves. The water is forced by any suitable pumping apparatus through a pipe L, connecting with a source of supply at the bottom to the tank M near the top of the elevator, the overflow from which connects with the slideway, as shown in Fig. 4, so that the water forced up into the tank escapes therefrom, running down to the bottom of the incline and emptying into the lake N at its foot, into which the boat plunges at the end of its descent, as illustrated in Fig. 1.

Referring now to Fig. 3, I return the boats, with or without their loads of passengers, as may be desired, to the top of the elevator in the following manner: *a* is an inlet which simulates a river, which opens from the lake N, flowing backwardly near the foot of the tower, and in it I submerge two timbers *b b*, between which operates an escalator-chain *c*. It passes over two rollers *d d'* (see Fig. 1) and also over another roller *e*. The roller *d'* is set somewhat lower than the roller *d*, the latter being about on a level with the top of the beams *b b*, a continuous sprocket-chain or equivalent device *f* (there are preferably, but not necessarily, two, but any number may be used) continuously moving over these rollers, the latter being driven by any suitable power, and these chains or like devices are provided with dogs *g g*, which project upwardly, preferably through the water, so that they may be readily seen. At the end of the river *a*, adjacent to the ends of the escalator-beams *b*, I provide two inclined runways *h h'*,

provided with a switch i , which is adapted to be thrown to the right or left by any suitable device actuated by hand or power, as the case may be, so that the oncoming boat may be shunted onto one or the other of the inclined runways h h' . These runways are provided with rollers j j' , so that the boat after being delivered by the escalator from the river onto the inclined runways will by its own momentum and under the action of gravity run down the same and be delivered upon the elevator D or D' , as the case may be, which are likewise provided, as shown, with rollers j^2 j^2 , similar to those upon the inclined runways. Suitable means are provided to prevent the boat rolling too forcibly upon the elevators—as, for instance, a spring bumper or cushion of any suitable construction. The swinging variety sometimes used in bowling-alleys would be very suitable for this purpose. The escalator is roofed over, as seen at k , Fig. 1, so that it simulates a tunnel, and the walls and ceiling of the tunnel may be decorated by painted scenery simulating hills, valleys, caves, and dells, and overhead clouds or electric-light effects of various sorts, as are now well known in this and analogous arts, may be used. Likewise the sides of the inclined runways are supplied with scenery, as seen at m m , Fig. 1. It, however, is open to the natural sky at the top, so that the inclined runways shall simulate rapids in a natural river. On a level with the elevators or in any other suitable position at the top of the tower there is provided for each elevator a laterally-arranged platform n n , which overhangs, respectively, the tank M , and these platforms are provided with rollers j^3 j^3 , so that the boats may be readily pushed off from the elevators, respectively, and, traveling upon the rollers j^2 thereon, roll onto the overhanging ledges n n , and traveling upon them on the rollers j^3 j^3 be shoved into the water at the top of the rapids—in other words, at the upper end of the slideway. I prefer to bevel off the forward end of the overhanging ledge, as shown at o , to facilitate this operation.

I have not illustrated the details of the mechanism required to pump the water, operate the elevators, move the escalator, operate the switch, &c., because, as stated above, any suitable hand or power machinery or device may be employed, depending upon the size of the apparatus, and consequently the amount of power required to effect the several mechanical movements. Also the details of construction so far as disclosed are by no means essential. The structure I have illustrated is a practical and useful one; but the details can be very largely departed from, the essentials being nevertheless retained, and it is not essential that the inclined runways from the top of the tower to the lake should be uneven or wavy nor that the escalator be of the form shown. Indeed, any means

whereby the boat after having made its descent can pass from the lake back to near the foot of the tower may be substituted for that shown.

The operation is as follows: Assuming that the boat is at a suitable landing somewhere on the shore of the lake N , the passengers get into the boat, which may beneficially be of the ordinary scow type and equipped with such appliances, seats, &c., as may be most desirable, and the boat is then propelled by oars, poles, or otherwise from the landing across the lake into the mouth of the river a and is brought by the boatman in such position that it shall rest in front of the dogs g of the continuously-moving or sprocket device f , as illustrated in Fig. 1. It will be easy for the boatman to locate these dogs if, as above stated, they project slightly above the surface of the water. It will be noted that the outer end of the escalator is submerged sufficiently so that the boat can be readily floated over the endless sprocket-chain or equivalent device without grounding upon any part of the structure. It is not essential, however, as stated, that such means for propelling the boat through the river should be employed. It may be rowed, poled, or otherwise propelled to the foot of the elevator, and any suitable means for removing it from the river onto the elevator may be employed. On the assumption, however, that the escalator is used, the boat, bearing its passengers, is carried along toward the elevator. As it proceeds, the switch i (see Fig. 3) is set so as to shunt the boat when it arrives at the switch into one or the other of the inclined runways, depending, of course, upon which of the elevator-cars is at the foot of the elevator-tower at that time. The boat is propelled by the dogs of the sprocket mechanism off from the escalator and onto the incline h . Thereupon, through the instrumentality of the rollers and under the impulse given by the escalator and by the action of gravity, the boat slides upon the runway and passing from its rollers onto the rollers of the elevator finally comes to rest upon the elevator, its movement being controlled by the bumpers or cushions, as stated. Thereupon the elevator is put into operation, and the boat, carrying its passengers seated therein, is elevated to the top of the tower, and as that elevator ascends the other or companion elevator descends, and in its descent it may automatically actuate the switch i in order to shunt the next succeeding boat down the inclined runway which leads to it. The elevator, bearing the boat and passengers, having reached the top of the tower, the boat, with the passengers still seated in it, (the passengers facing about, if desired, because otherwise they will be facing backward for the descent of the slideway,) is by suitable appliances rolled off from the

elevator onto the platform *n* and over its overhanging ledge down the river-rapids—in other words, the inclined slideways—receiving in its descent the wavy-like impulses due to the irregular outline of the slideway, the illusion being further heightened by the rippling of the water and the forest-covered river-banks. At the bottom the boat plunges into the pool or lake and is then guided or propelled by the boatman to the landing, where the passengers disembark, the boat, receiving a fresh load of passengers and proceeding as before. It will be understood that during all this time a suitably-acting pump has been forcing the water from the pool or lake level up into the tank at the top of the rapids or incline, which, overflowing its front edge, has run down the incline, and thus there is continuous circulation of substantially the same body of water.

Obviously there is no limit to the number of boats that can be successively in operation, care being taken, however, that if the escalator be used a boat is delivered by it to the inclined runway at the foot of the tower only when there is an elevator there ready to receive it. Also it is obvious that the system may be indefinitely extended, there being no limitation as to the number of elevators, escalators, &c., that may be combined. Also the escalator to convey the boat from the lake to the foot of the tower and there deposit it upon the elevator may be arranged as over dry land, so as to give the effect of the portage or tramway instead of being submerged in the water and arranged in connection with the lake, simulating an underground river. I very much prefer the latter, however, because then the underground effects and other illusions and pictorial schemes may be more effectively and attractively carried out.

I claim—

1. The combination of a tower, an inclined runway extending from near the top of the tower to a body of water, an escalator adapted to convey the boat from the body of water to near the foot of the tower, a boat and an elevator in the tower.

2. The combination of a tower, an inclined runway extending from near the top of the tower to a body of water a waterway extending from the body of water to near the foot of the tower, an elevator in the tower, a boat

and means to transfer the boat from the waterway to the elevator.

3. The combination of a tower, an inclined runway extending from near the top of the tower to a body of water, a waterway extending from the body of water to near the foot of the tower, an escalator for conveying the boat through the waterway, an elevator in the tower, a boat and means to transfer the boat from the escalator to the elevator.

4. The combination of a tower, an inclined runway having a wavy or irregular surface contour extending from near the top of the tower to a body of water, a waterway extending from the body of water to near the foot of the tower, an elevator in the tower, a boat and means to transfer the boat from the waterway to the elevator.

5. The combination of a tower, an inclined runway having an irregular or wavy surface contour extending from near the top of the tower to a body of water, a waterway extending from the body of water to near the foot of the tower, an elevator in the tower, a boat, and means to propel it through the waterway and from it to and upon the elevator.

6. The combination of a tower, an elevator in the tower, a body of water, a waterway extending from the body of water to near the elevator, a boat and means to mechanically transfer the boat and its passengers from the waterway to and onto the elevator.

7. The combination of a tower, an inclined runway extending from near the top of the tower to a body of water, a ledge on the top of the tower provided with rollers and overhanging the upper end of the runway, an elevator provided with rollers adapted to elevate a boat from a lower level to the level of the ledge.

8. The combination of a tower having therein an elevator provided with rollers, a waterway through which a boat and its load may approach the foot of the tower and an inclined runway provided with rollers extending from the end of the waterway to the elevator.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MAX E. PESTER.

Witnesses:

D. S. RITTERBAND,
F. M. DOUSBACH.