

925,840.

H. E. RIEHL.
AQUATIC MERRY-GO-ROUND.
APPLICATION FILED OCT. 8, 1908.

Patented June 22, 1909.

3 SHEETS—SHEET 1.

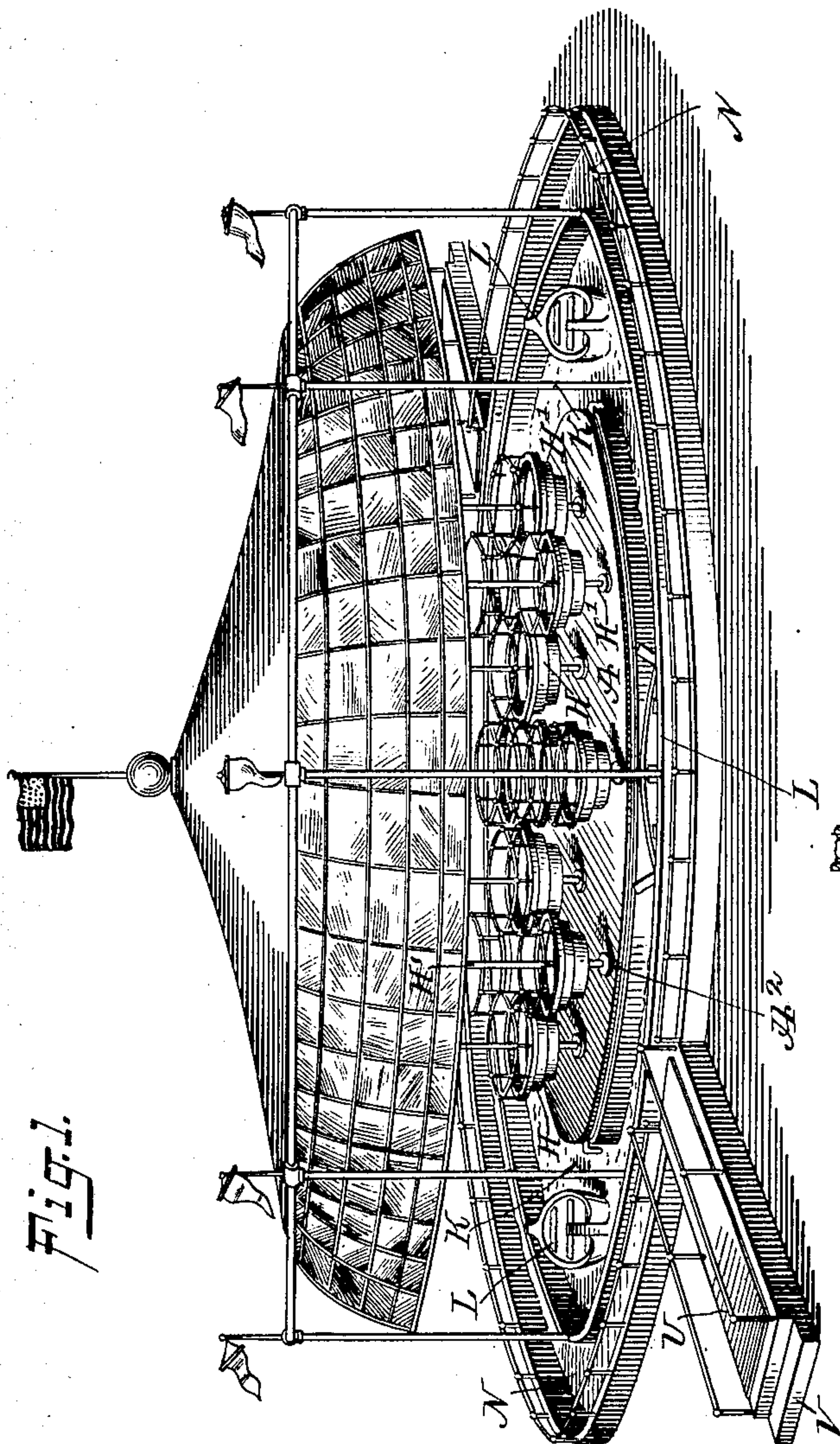


Fig. 1.

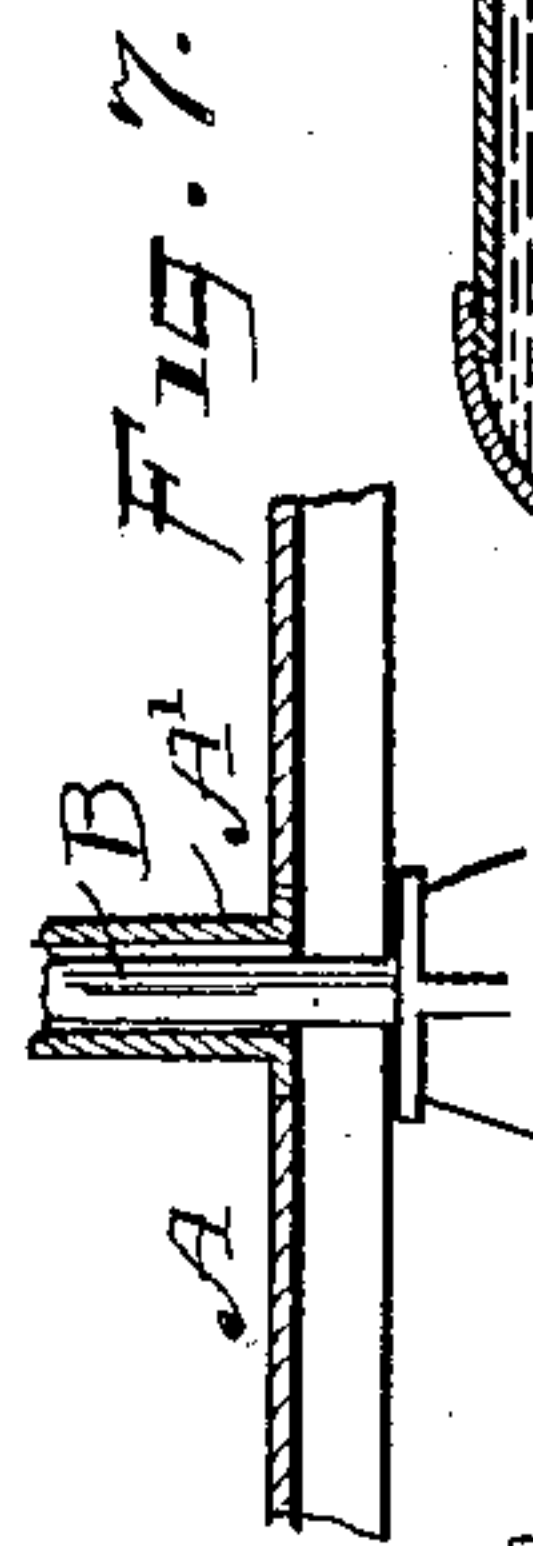
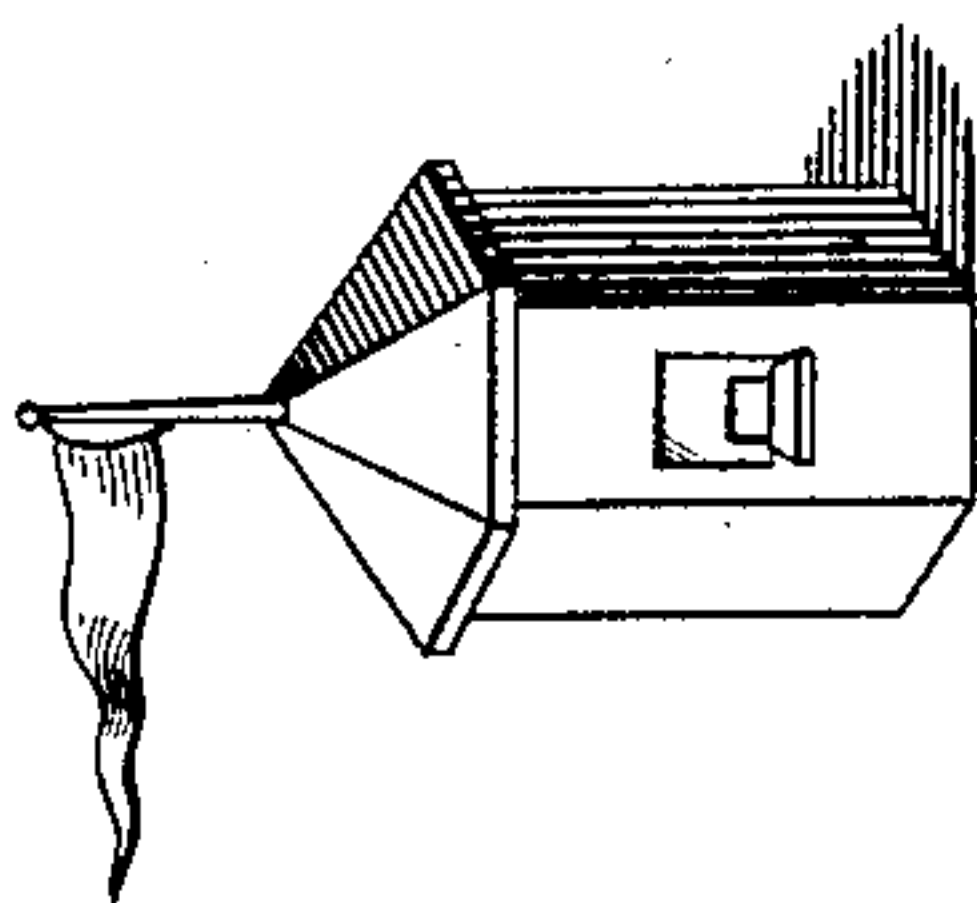


Fig. 7.

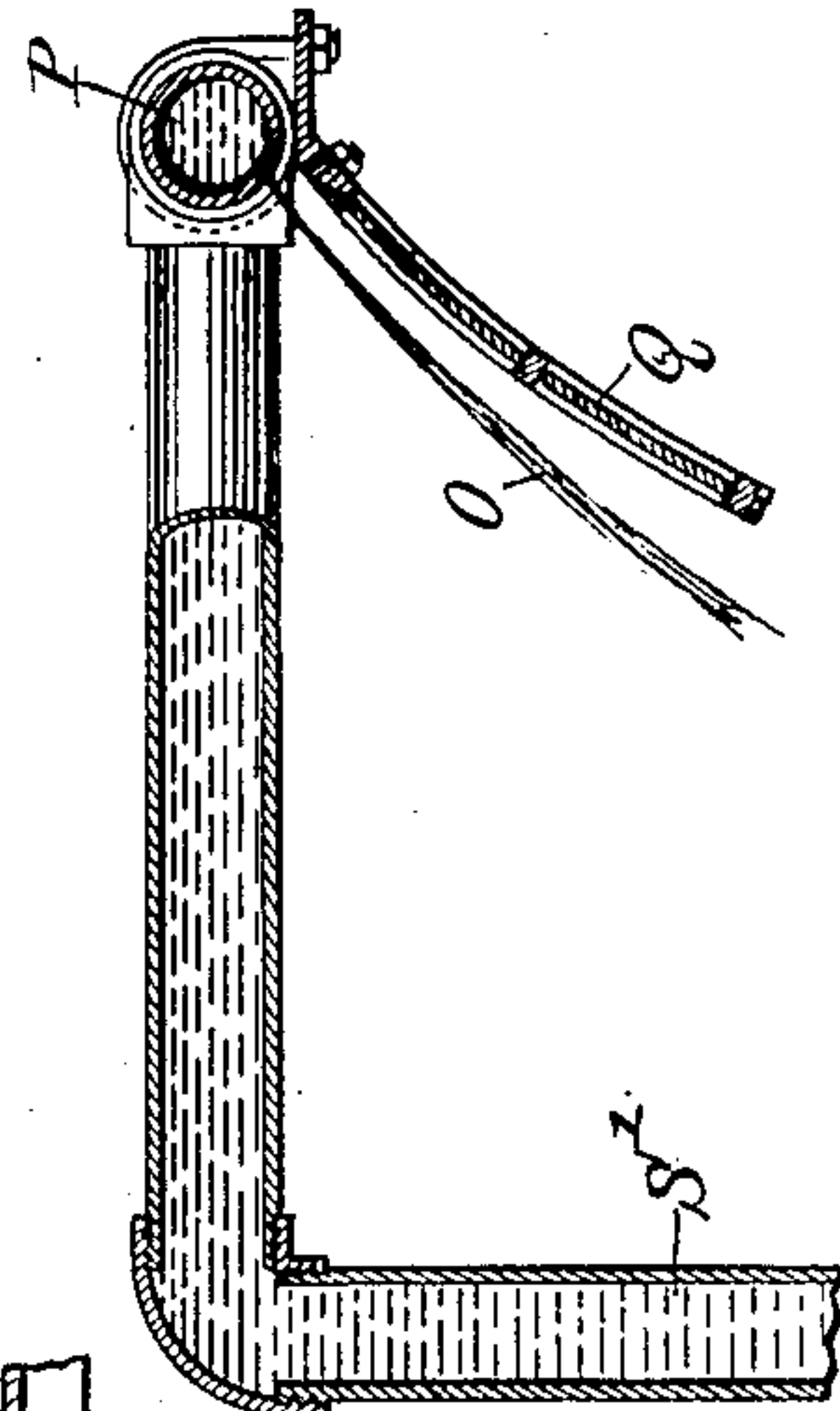


Fig. 6.

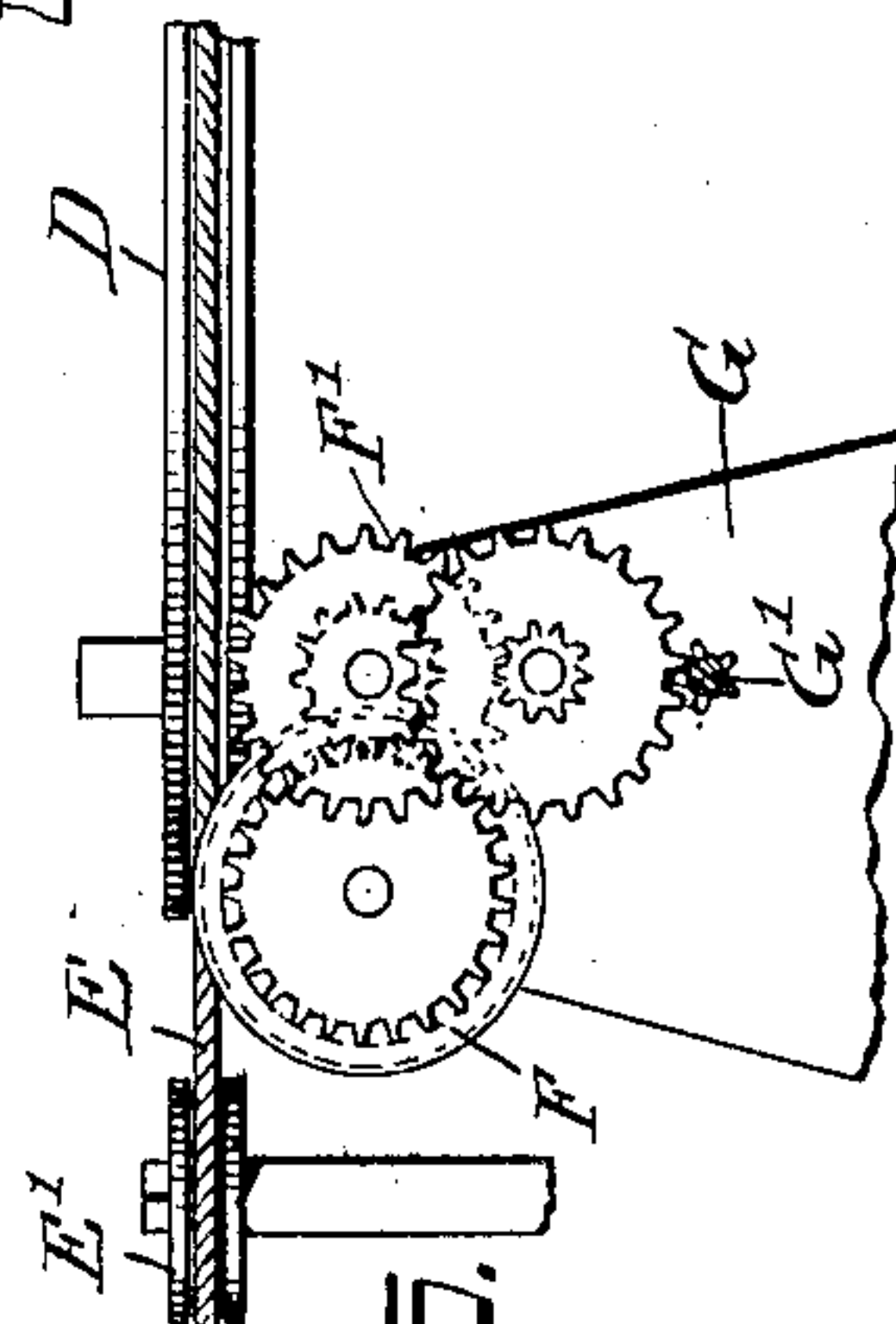


Fig. 5.

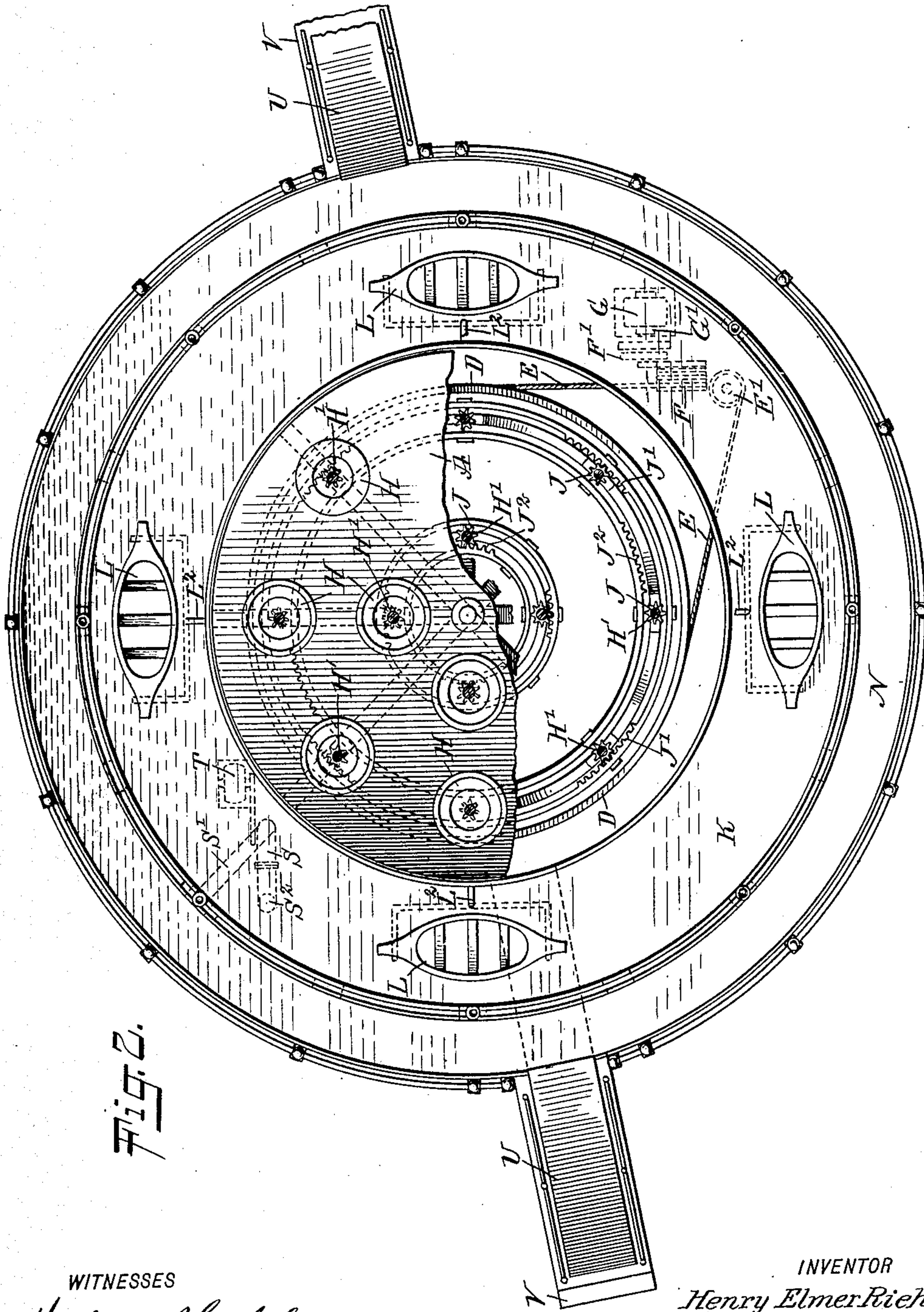
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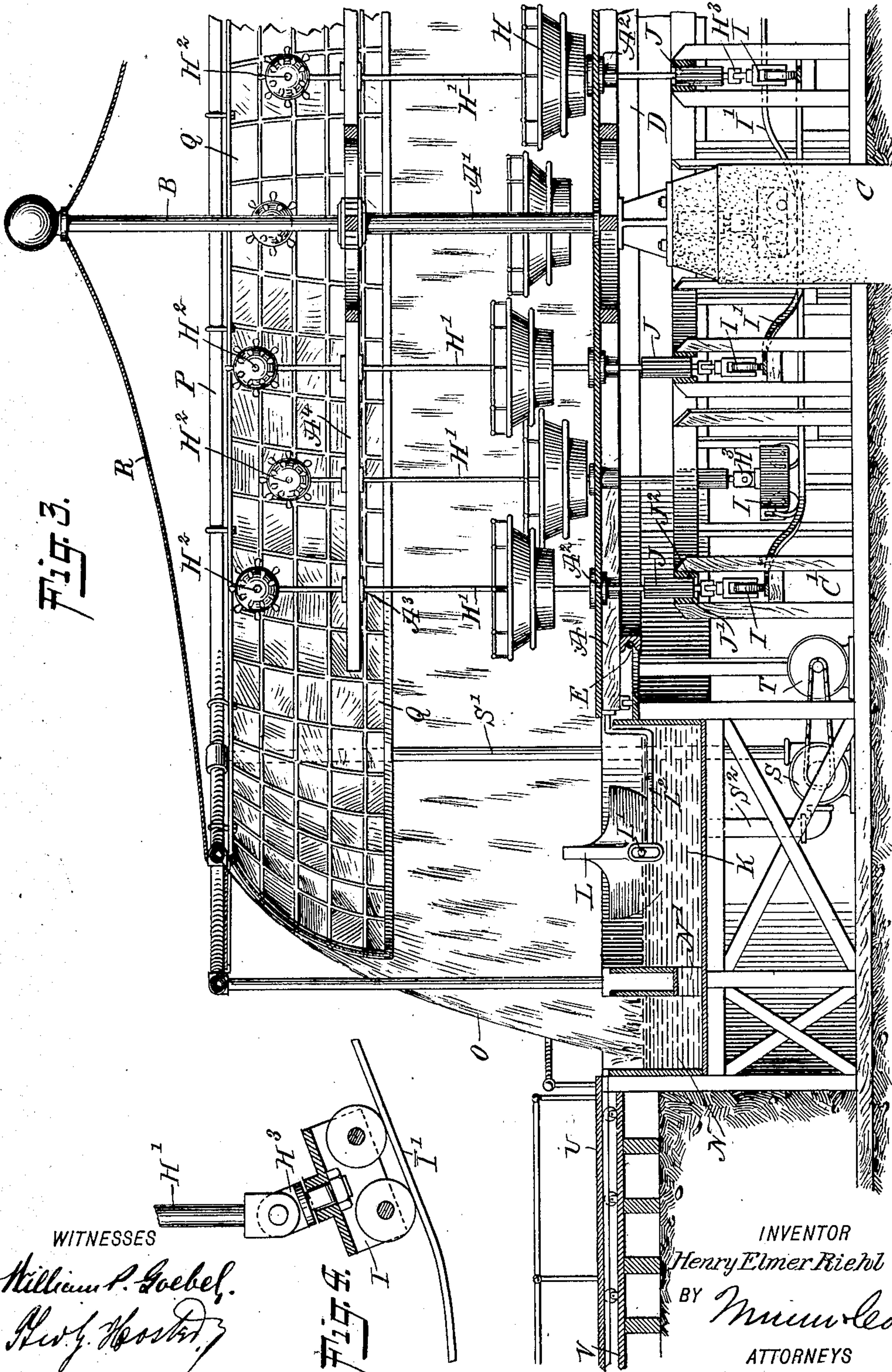
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3 SHEETS—SHEET 3.

925,840.



UNITED STATES PATENT OFFICE.

HENRY ELMER RIEHL, OF NEW YORK, N. Y.

AQUATIC MERRY-GO-ROUND.

No. 925,840.

Specification of Letters Patent.

Patented June 22, 1909.

Original application filed August 28, 1907, Serial No. 390,487. Divided and this application filed October 8, 1908.
Serial No. 456,721.

To all whom it may concern:

Be it known that I, HENRY ELMER RIEHL, a citizen of the United States, and a resident of the city of New York, Coney Island, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Aquatic Merry-Go-Round, of which the following is a full, clear, and exact description, this being a division of the application, No. 390,487, filed by me August 28, 1907.

The object of the invention is to provide a new and improved aquatic merry-go-round, arranged to afford an exceedingly novel and highly interesting ride.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improvement; Fig. 2 is a plan view of the same, the roof being omitted and parts being broken out; Fig. 3 is an enlarged sectional side elevation of the improvement; Fig. 4 is an enlarged sectional side elevation of the improvement showing the sinuous track and a car shaft; Fig. 5 is a side elevation of the driving mechanism for the revoluble platform; Fig. 6 is an enlarged sectional side elevation of the water distribution for producing an annular falling sheet of water, and Fig. 7 is a sectional side elevation of the platform and its hub mounted to turn on the post.

The platform A of the merry-go-round has its hub A' mounted on a suitable post B erected on a foundation C, as plainly indicated in Fig. 3. The under side of the platform A is provided with a grooved pulley D around which passes an endless cable or rope E winding on a drum F driven by a suitable gearing F' from the shaft G' of a motor G of any approved construction. A guide pulley E' directs the cable or rope E to the drum F, so as to insure proper winding up and unwinding of the cable or rope B on the drum F. Now when the motor G is in operation and the drum F is driven, then a traveling motion is given to the cable or rope E, and as the latter engages the pulley D it is evi-

dent that a rotary motion is given to the platform A.

The platform A is provided with one, two or more sets of bearings A², each set being arranged in a circle and the several sets being concentric one to the other, as plainly indicated in the drawings. Each of the bearings A² is mounted to turn and to slide up and down a shaft H' supporting a car H above the platform A, each car H being preferably circular and capable of seating a number of persons grouped around the centrally arranged shaft H'. Each shaft H' is also mounted to turn and to slide in an overhead bearing A³ carried on an overhead frame A⁴ attached to the upper end of the hub A', extended for this purpose above the platform, as indicated in Fig. 3. The top of each shaft H' is preferably provided with a suitable lamp H², preferably in the form of a cluster of electric lights, as indicated in Fig. 3. Each of the shafts H' below the platform A is pivotally connected by a swivel H³ with a wheeled support I having its wheels traveling on an undulatory track I' erected on a suitable framework C' surrounding the foundation C. Now by the arrangement described the wheeled supports I in following the corresponding track I' travel up and down and consequently impart an up and down sliding motion to the shafts H', so as to move the cars H correspondingly up and down during the time the platform A is turning around.

Each of the shafts H' is provided below the platform with a pinion J adapted to mesh alternately at the opposite sides with segmental gears J' and J² attached to the framework C', as plainly indicated in Figs. 2 and 3. Now when the platform A is revolving and the shafts H' are carried along with the platform, then the pinions J move alternately in mesh with the segmental gears J' and J², so that the shafts H' and with them the cars H are first turned in one direction, and then turned in an opposite direction, while bodily moving with the platform A and at the time the cars H are rising and falling. From the foregoing it will be seen that the passengers in a car undergo several movements, that is, are carried bodily around with the platform A, are moved up and down and turn alternately with the car around in opposite directions.

Outside of the platform A and preferably extending below the same is arranged an annular water-way K for containing water on which are adapted to travel boats L, provided at their front and rear ends with pins L' engaged by the slotted ends of forked arms L² attached to the platform A, as plainly indicated in Figs. 2 and 3, so that when the platform A is rotated, as above described, then the arms L² in moving with the platform carry the boats L along; thus the boats L float on the water in the water-way K and move in unison with the platform A.

Concentric with the water-way K and outside of the same is arranged another water-way or water receiver N, connected by one or more ports N' with the water-way K, so that water passing into the receiver N can flow into the water-way K, to maintain the water at a uniform level therein. Into the water receiver N drops an annular sheet of falling water O, which forms a wall or inclosure for the merry-go-round above described, so that the occupants of the cars H and boats L are practically inclosed within the said sheet of falling water, that is, are practically screened from the outside public by the water, which may be illuminated by the rays of the sun to produce highly colored effects. In order to produce this annular sheet of falling water O, a perforated annular pipe P is arranged a distance above the merry-go-round and at the top of a rim Q, forming part of the fixed roof R of the amusement apparatus, and which roof R is supported by the upper end of the post B. The rim Q is preferably built up of a skeleton framework covered with glass or a similar transparent or translucent material, preferably of varying colors, so as to heighten the ornamental effect. The rim Q is curved downwardly and outwardly, so that water discharged onto the upper end of the rim Q flows downwardly over the outside of the rim, to finally drop off the same in the form of a continuous annular sheet, as plainly indicated in Fig. 3.

Water is supplied to the perforated pipe P by the discharge pipe S' of a pump S of any approved construction and which has its suction pipe S² connected with the water-way K so that the water in the latter and the water receiver N is continually kept in circulation, that is, the water is used over and over again. The pump S is driven by a suitable motor T, as indicated in Fig. 3. At the end of a ride in the merry-go-round the motor T is stopped so as to stop the flow of the water to the pipe P, with a view to discontinue the sheet of falling water during the time passengers embark or disembark in and from the cars H and boats L. Now in order to reach the platform A from the outside one or more bridges U are employed, adapted to be thrown across the water receiver N and the water-way K, to establish communication

between the platform A and the entering platform V, arranged outside of the water receiver N. After the passengers are seated in the cars H and boats L the bridges U are withdrawn, and then the motors G and T are started, so as to cause the platform A to revolve and to produce the sheet of falling water O, as previously explained. When the platform A revolves, the cars H and boats L are carried along and in addition an up and down turning movement is given to the cars H, to render the ride exceedingly interesting to the occupants of the cars.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A merry-go-round, comprising a platform, means for rotating the platform, a plurality of shafts mounted for vertical sliding movement in the said platform, an undulatory circular track fixed below the said platform, wheeled supports traveling on the said track, a swivel connection between the said supports and the lower ends of the said shafts, cars on the said shafts above the platform, and means for rotating the said shafts in alternate directions.

2. A merry-go-round, comprising a platform, means for rotating the platform, a plurality of shafts mounted for vertical sliding movement in the said platform, an undulatory circular track fixed below the said platform, wheeled supports traveling on the said track, a swivel connection between the said supports and the lower ends of the said shafts, cars on the said shafts above the platform, sets of gear segments, each set having two segments disposed on opposite sides of the path of the axes of the said shafts, and pinions on the said shafts and adapted to mesh alternately with the segments in the said sets of segments.

3. An aquatic merry-go-round, comprising a revoluble platform, means for rotating the said platform, an annular water-way outside the said platform and extending below the same, the top of the inner wall of the water-way being in close proximity to the outer edge of the platform, boats floating in the said water-way and each provided at the ends with pins, and forked arms attached to the platform and engaging the said pins.

4. An aquatic merry-go-round, comprising a revoluble platform, means for rotating the said platform, an annular water-way outside the said platform and extending below the same, the top of the inner wall of the water-way being in close proximity to the outer edge of the platform, boats floating in the said water-way, and each provided at the ends with submerged longitudinally-extending pins, and forked arms secured to the said platform and having slotted ends engaging the said pins.

5. An aquatic merry-go-round, comprising

a revoluble platform, means for rotating the said platform, an annular water-way outside the said platform and extending below the same, the top of the inner wall of the water-way being in close proximity to the outer edge of the platform, boats floating in the said water-way, connections between the said platform and the said boats, a second annular water-way outside the said first-named water-way, and a removable bridge for spanning the said water-ways to reach the said platform.

6. An aquatic merry-go-round, comprising a revoluble platform, means for rotating the said platform, an annular water-way outside the said platform and extending below the same, the top of the inner wall of the water-way being in close proximity to the outer

edge of the platform, boats floating in the said water-way, connections between the said platform and the said boats, a second annular water-way outside the said first-named water-way, a fixed entering platform outside the said second waterway, and a bridge movable on the said entering platform and adapted to span the said waterways to establish communication between the said revolving platform and the said fixed entering platform.

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

HENRY ELMER RIEHL.

Witnesses:

THEO. G. HOSTER,
JOHN P. DAVIS.