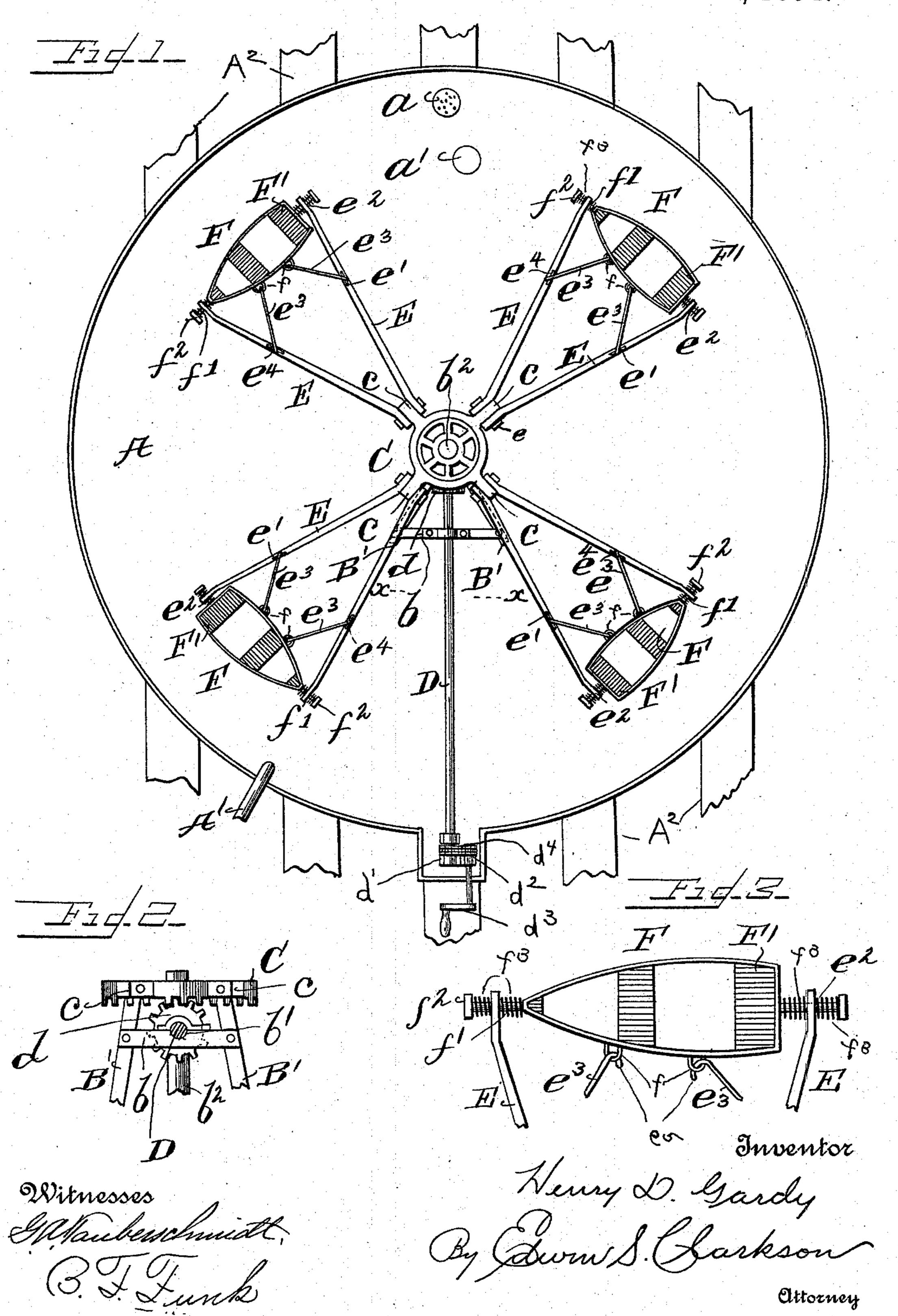
H. D. GARDY. ROUNDABOUT.

No. 527,962.

Patented Oct. 23, 1894.



United States Patent Office.

HENRY D. GARDY, OF CHESTER, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO TAYLOR C. BURK, OF SAME PLACE.

ROUNDABOUT.

SPECIFICATION forming part of Letters Patent No. 527,962, dated October 23, 1894.

Application filed June 14, 1894. Serial No. 514,581. (No model.)

To all whom it may concern:

Beit known that I, HENRY D. GARDY, a citizen of the United States, residing at Chester, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Roundabouts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates broadly, to the class or kind of rotating or revolving pleasure carriages commonly known as round-abouts or

merry-go-rounds.

The object of my invention is to produce a device of the kind referred to, in which the conveyances for passengers will be in the form of boats which will be solely supported on the water, and so attached that they will have a free motion of the water whereby they will rise and fall and have motion similar to the motion of the waves as they are moved in the water.

A further object is to provide a buffer or buffers on each boat to obviate jerking to the

boats in starting.

A further object is to provide means which will prevent accidental tipping of the boats; and with these objects in view my invention consists further of the parts and combination of parts as will be hereinafter more fully set out.

In the drawings: Figure 1 is a top plan view of my invention. Fig. 2 is a vertical section on the line X—X Fig. 1, parts being broken away. Fig. 3 is a detail view.

A represents a tank adapted to receive and hold water; A', the inlet for said tank; a, the outlet, and a' the man hole, at the bottom of said tank which is used only when it becomes necessary to empty the tank and clean it.

A² is a suitable platform built around the tank for the convenience of passengers.

B' are standards of a suitable truss work

45 or support.

b is a cross bar secured between two of the standards B', and provided with a journal bearing b', to be hereinafter referred to. This truss work or brace is secured, in a suitso able manner, in the center of the tank A.

Extending upward from the center of the brace B is a suitable shaft b^2 .

C is a crown wheel journaled on the shaft b^2 , and provided with suitable short arms c, each having an aperture or opening near its 55 outer end.

D is a suitable shaft journaled in the bearing b' and in a suitable bearing at its outer end. d is a suitable cog or gear wheel secured to the inner end of said shaft and 60 adapted to mesh with the crown wheel C. d' is a cog or gear wheel secured to the outer end of said shaft.

 d^2 is a cog wheel suitably mounted and provided with a crank arm d^3 and d^4 is a driving 65 belt or chain connecting the cog or gear wheel

d' and d^2 .

E represents suitable arms secured to the short arms c, by means of suitable pins or bolts e, in such a manner that the connection 70 between the two arms will be a hinge like connection. The arms E are provided with eyes e' located about their center, while they are also provided with an eye e^2 in their extreme outer end. e^3 are braces each provided with 75 an eye e^4 on one end, which engages the eye e' on the arms E, while the other end is bent to form a hook e^5 .

F are the boats for carrying passengers.
F' are suitable seats, which I have shown 80 as slatted, this form being desirable from the fact that any water spilled on them will more readily run off.

f are staples or rings secured in one side of each boat in which the hooks e^5 of the 85 braces e^3 are secured, thus preventing the boat

from accidental tipping.

f' are short rods extending from the bow and stern of the boat and provided with a head f^2 , which may be either a screw cap, or 90 any other suitable construction.

 f^3 are buffer springs coiled around the rods f' on each side of the arms E. These spring buffers f^3 obviate the jerk to the boats incident to starting and stopping the machinery 95 and to a certain extent relieve the machinery from strain.

It will be readily understood from the above that the only strain (if it can be called such) upon the arms C is that incident to pulling the 100

boat through the water, as the hinge connected between the arms e and E and the swivel connections between the boat and arms E will throw the entire weight of the boat and its occupants on the water, no matter how heavily the boat is loaded. This is an important point in this class of round-abouts, as it has been found in other constructions, where the arms propelling the boats are rigidly secured and the boats more or less rigidly secured to the arms, that the arms frequently break off, and the boats carry more than a certain amount of weight.

It is obvious that the device may be operate ated by any motive power found desirable.

Should the boats become filled or partly so, with water, the hooks e^5 are disengaged from the staples or rings f. Thus they may be turned on the swivel connections until the vater is all out, when they are returned to their proper positions and the hooks e^5 are replaced in the rings f.

The entire apparatus is preferably located below the surface of the water, excepting the outer ends of the arms E and braces e^3 which are secured to the boat.

The operation being obvious it is deemed

unnecessary to describe it.

From the foregoing it will be seen that I 30 have provided a cheap, simple, effective device of the character described and one that is light and portable.

It is obvious that slight changes may be made in the parts and combinations of parts without departing from the spirit of my invention and hence I would have it understood that I do not confine myself strictly to the construction described.

What I claim, and desire to secure by Let-40 ters Patent, is—

1. In a roundabout the combination with the foundation, power mechanism secured

thereto, and arms extending from said mechanism, of boats, a bolt or pin projecting from the bow and stern of the same, to which the 45 arms are loosely secured, and a spring coiled around said bolt or pin on each side of the said arms.

2. In a roundabout the combination with power mechanism, of a crown wheel, arms 50 hinged to and extending from said wheel, braces having a hooked end and loosely secured to said arms, and a boat swiveled to said arms and provided with staples or rings in one side, in which the braces are adapted to 55 hook whereby the boats are free to take the

motion of the water.

3. In a roundabout the combination with a tank, of a brace or truss work forming a foundation in the center of said tank, a crown 60 wheel journaled on said foundation, short arms projecting from and integral with the crown wheel, of long arms hinged or pivoted to said short arms, braces loosely secured to said long arms, a boat having a swivel con- 65 nection with said long arms, and provided with staples or rings in its side, in which the braces secured to the long arms hook, a journal bearing secured to the foundation, a shaft journaled therein, a cog or gear wheel se- 70 cured to each end of the shaft, one of which meshes with the crown wheel, while the other engages with a cog or gear wheel by means of a belt or chain, and a suitable motor connected with the last named cog or gear wheel, all 75 combined and operating substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

HENRY D. GARDY.

Witnesses:

CHARLES PALMER, W. HINKSON.