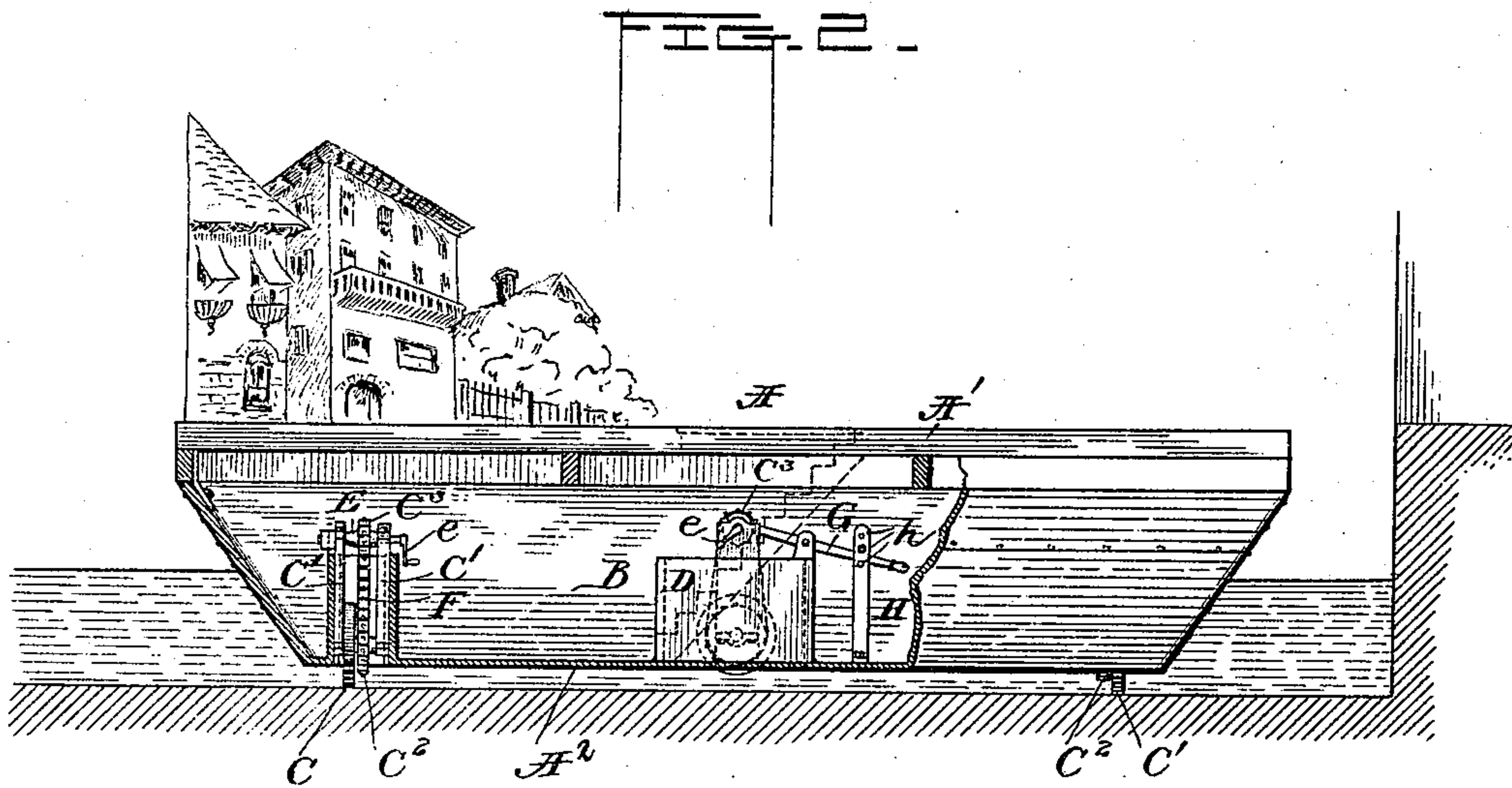
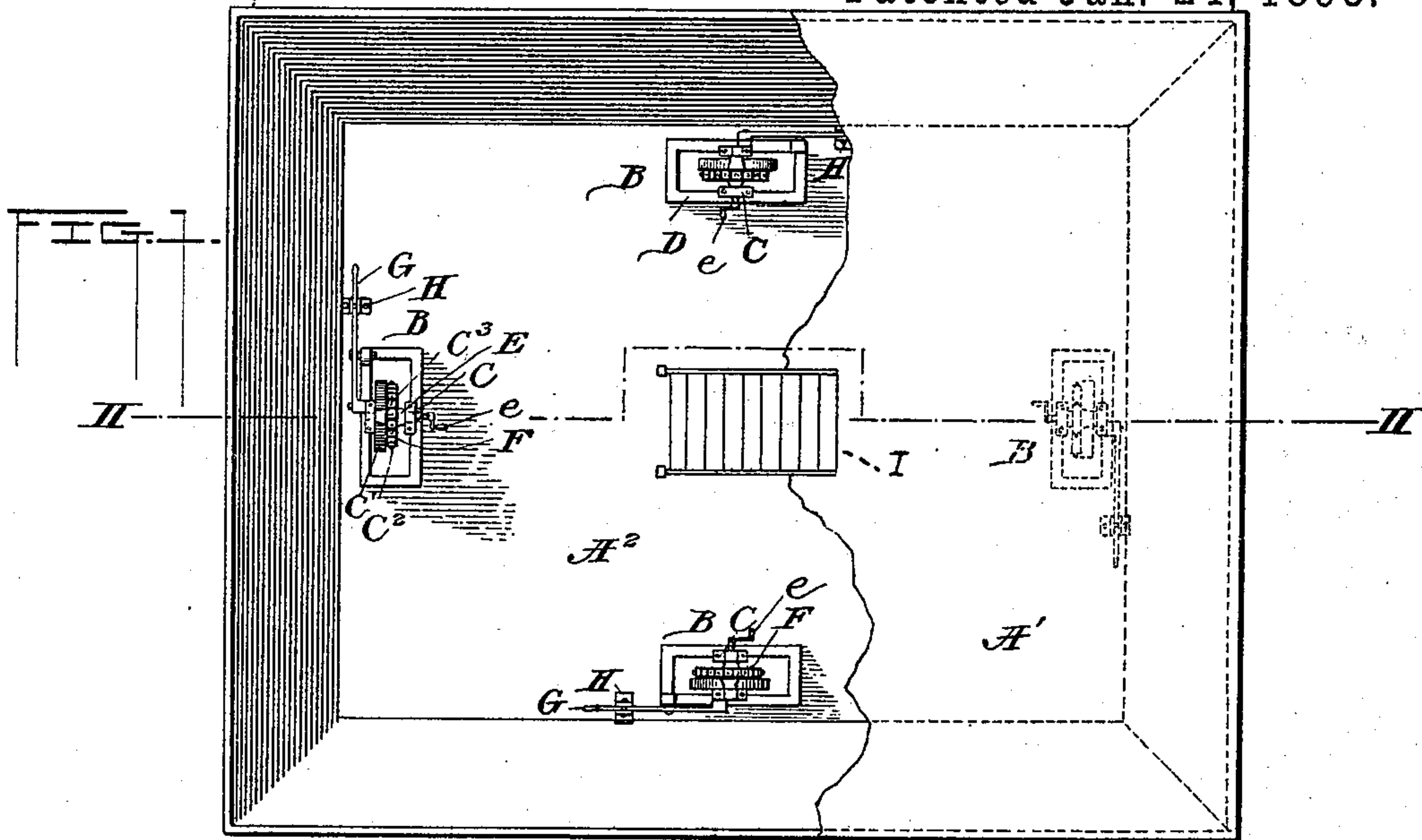


(No Model.)

S. MACKAYE.
FLOATING STAGE.

No. 490,488.

Patented Jan. 24, 1893.



Witnesses

L. A. Connor & S.
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UNITED STATES PATENT OFFICE.

STEELE MACKAYE, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE SPECTATORIA COMPANY, OF SAME PLACE.

FLOATING STAGE.

SPECIFICATION forming part of Letters Patent No. 490,488, dated January 24, 1893.

Application filed May 25, 1892. Serial No. 434,296. (No model.)

To all whom it may concern:

Be it known that I, STEELE MACKAYE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Floating Stages; 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 to theatrical appliances, and has special reference to apparatus for producing scenic effects.

The object of the invention is to provide an improved floating stage which is susceptible of a to and fro or rotary movement and may be propelled forward and back or in a curvilinear direction upon an artificial lake, tank or other body of water and sustained when desired in a fixed position in respect to other objects or other stages of the same kind arranged in proximity thereto, so that scenery, paintings or other objects or persons placed on the stages may be exhibited to an audience through the usual proscenium opening of a theater or other structure adapted for the exhibition of spectacular, dramatic, or other performances.

The invention will first be described with reference to the accompanying drawings, and then pointed out in the claims at the end of this specification.

Referring particularly to the drawings, which form a part of this specification and in which similar letters of reference are used to denote similar parts, Figure 1, represents a plan of a floating stage embodying my invention; the stage floor or deck being partly broken away to show the arrangement of parts underneath; Fig. 2, is a sectional side elevation of the invention.

A, denotes the stage as a whole, which may consist of a suitable body or hull having the floor or deck A' supported a sufficient distance above the bottom A², to permit a person of ordinary height to stand thereon for the purpose of manipulating the propelling and sustaining mechanism which is arranged so as to be operated from the interior of the hull.

B, B, B, B, denote the propelling and sus-

taining mechanisms, comprising four (more or less) wheels or rollers C, and suitable connections for raising and lowering said wheels and also for rotating the same so as to move the stage in any desired direction or for the purpose of sustaining the stage in a fixed position when the several wheels are lowered so as to rest upon the platform or other foundation forming the bottom of the lake or tank containing the water upon which the stage may float. In the arrangement shown four wheels are provided, though a less number may be employed. One wheel is placed centrally of the stage at each end and side thereof; the two wheels at the sides and ends being arranged opposite each other so that when the two side wheels are raised and the end wheels lowered the stage may be moved sidewise, and when the two end wheels are raised and the two side wheels lowered it may be moved lengthwise, or forward and back. Inasmuch as these several sustaining and propelling mechanisms are alike a description of one will be a sufficient description of the construction of all, and therefore reference will be made particularly to one set only.

C', C', denote vertically movable slides which are fitted in suitable ways upon the inner walls of a curb or open-ended watertight box D, the upper end of which projects up into the interior of the hull A a sufficient distance above the bottom thereof to prevent the entrance of water therethrough. The slides C', C', are provided with journal boxes or bearings at each end, and in the upper set of bearings is journaled a transverse shaft E, while in the lower set is journaled the axle of the wheel C.

C² denotes a toothed wheel or pulley fixed upon the shaft of the wheel C, and C³ a similar wheel or pulley, but of less diameter than the wheel C², fixed upon the shaft E.

F, is an endless chain or belt connecting the wheels C², C³, so as to impart motion from the wheel C³ to the wheel C² when the shaft E is rotated. The shaft E carries at one end a crank handle e.

G denotes a hand-lever the short arm of which is pivoted to the upper end or ends of the slides C', while its long arm is adjustably secured to a slotted or other suitable stand-

ard or rack-bar H, which latter may have a series of holes *h*, formed therein to receive a transverse pin, by which means the lever may be adjusted and held in a fixed position with the wheel C, elevated above the bottom of the hull, or lowered beneath the same, as may be desired.

By the described construction, with the several wheels and their operating mechanisms located as above described, by elevating the pair of wheels at the ends or sides of the stage and depressing the pair which is arranged at right angles thereto, the stage may be moved lengthwise or sidewise by rotating the crank shafts E of the depressed pair; and when the wheels are in the position just described, by allowing one crank axle to remain stationary and operating the crank at the opposite side or end of the stage, the latter may be rotated about the stationary wheel as a fixed center, or by rotating the crank axles at the sides or ends of the stage in opposite directions, or the wheels of each pair in opposite directions a rotary movement may be effected either to the right or left, according to the direction of rotation, by the action of either or both pair of wheels and operating mechanisms.

I, denotes a hatchway for the ingress or egress of operators, which may be provided with any suitable cover, preferably arranged on a level with the floor or deck, and steps or other means may be provided to enable the operators to readily enter or leave the interior of the hull. If necessary ports or openings for the admission of air and light may also be provided in the body or hull of the float.

It is manifest that the mechanism for effecting the movements of the stage may be modified in a number of ways, and that the location and arrangement of the several parts may be varied to meet various requirements without departing from the spirit of my invention. Hence, I do not desire to be limited to the exact construction and arrangement of parts shown and described.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States, is:—

1. In theatrical appliances, a movable floating stage and mechanism, substantially as described, for propelling the stage to and fro or sustaining it in a fixed position partly submerged in water, substantially as described.

2. A floating stage comprising a suitable hull or body adapted to be partially submerged in or float upon a body of water, vertically adjustable supporting wheels whereby the stage may be sustained in a fixed position or moved to and fro upon the water, and means for raising and lowering said wheels

and for rotating the same, substantially as described.

3. A floating stage comprising a suitable hull or body mounted upon wheels which have their bearings in vertically adjustable slides, means for adjusting said slides and locking the wheels in the desired position, and mechanism for rotating the wheels for the purpose of moving the stage when partly submerged in water, substantially as described.

4. In theatrical appliances, a movable rotatable floating stage, and mechanism substantially as described for effecting the movements of the stage and sustaining it in a fixed position partly submerged in water, substantially as described.

5. In combination with the floating stage having the hull with curb projecting upwardly therein, the vertically movable slides, the hand lever, the crank shaft and supporting wheel journaled in said slides, and gearing connecting said shaft and wheel whereby the latter may be rotated, substantially as described.

6. In combination with the floating stage having the curb extending upwardly through the bottom thereof, the vertically movable slides, the crank shaft and supporting wheel journaled in opposite ends of said slides, the toothed wheels and endless chain connecting said shaft and supporting wheel and the hand lever and means for adjusting and securing said supporting wheel in the desired position, substantially as described.

7. In combination with the floating stage having the curbs therein arranged at the sides and ends of the stage, the vertically adjustable slides fitted in said curbs and having the supporting wheels journaled therein; the end wheels being arranged at right angles to the wheels at the side of the stage, the crank axles also journaled in said slides, the toothed wheels fixed on said crank and wheel shafts, the endless chains connecting said toothed wheels, the hand levers pivoted to said slides, and the perforated standards or rack-bars and means for adjustably securing said levers thereto, substantially as described.

8. In combination with the floating stage, the vertically adjustable supporting wheel journaled in slides which project into the interior of the hull, the crank shaft also journaled in said slides, and gearing connecting said crank shaft and wheel for the purpose of rotating the wheel, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

STEELE MACKAYE.

Witnesses:

POWEL CROSLY,

SIDNEY CLARKE WHITE, Jr.