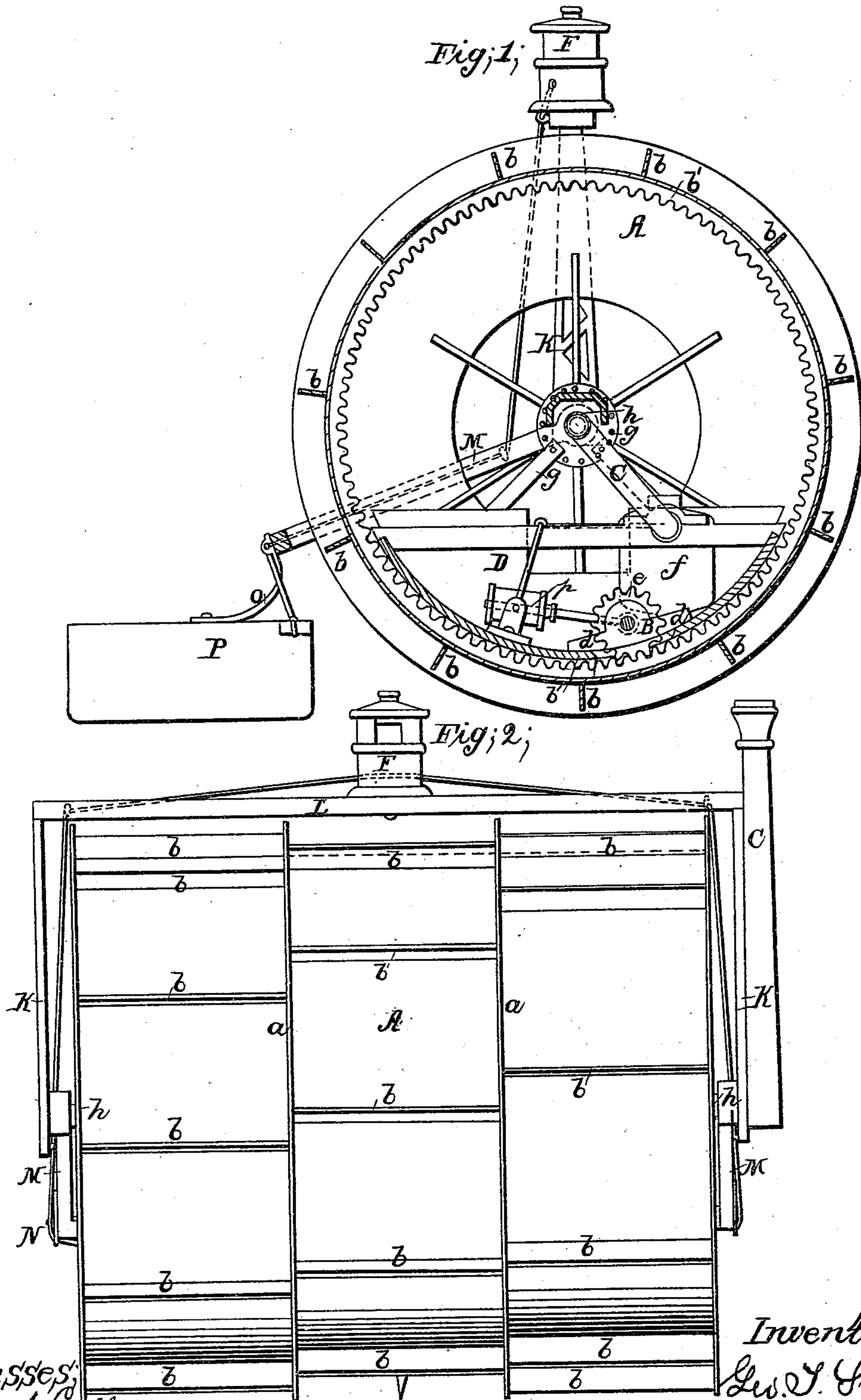


G. T. Snyder
Buoyant Propeller.

N^o 94,143.

Patented Aug 24, 1869.



Witnesses;
John A. Ellis
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GEORGE T. SNYDER, OF WILMINGTON, DELAWARE, ASSIGNOR TO HIMSELF AND
GEORGE W. AIREY, OF BALTIMORE, MARYLAND.

Letters Patent No. 94,143, dated August 24, 1869.

IMPROVEMENT IN ROTARY STEAM-VESSELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE T. SNYDER, of Wilmington, in the county of New Castle, and State of Delaware, have invented certain new and useful Improvements in Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 represents a transverse vertical section, and

Figure 2, a side view of my improved revolving vessel.

Similar letters of reference indicate like parts in both figures of the drawings.

The nature of my invention consists—

First, in the novel arrangement of a pilot-house, in relation to a revolving vessel;

Second, in the construction and arrangement of a hollow shaft or tube and smoke-stack, whereby smoke and steam from an engine-furnace may be carried off; and

Third, the combination of a segmental platform or car and centrally-arranged shaft, whereby said car is suspended from the centre of the vessel, as will be hereafter more fully described.

To enable others skilled in the art to make and use my invention, I will now describe the construction and operation of the parts.

In the accompanying drawings—

A represents a cylindrical vessel, provided with a suitable number of flanges, *a a*, and to which are secured the buckets or paddles *b b*.

The vessel A is designed to roll or revolve upon either land or water, the flanges *b b* protecting the paddles when used on land, and is to be propelled by power and machinery, adjusted inside of said vessel.

Inside of the vessel A, are secured and arranged two or more inside gear-wheels, *b' b'*, which serve as racks, and which are operated upon and caused to revolve by the pinions *e e*, which, in turn, are propelled by means of a steam or other engine, *p*, adjusted upon and connected with the oscillating segmental car D.

The pinions *e e* are secured upon the shaft B, which has its bearings in the car D, as will be seen by reference to the drawings.

The segmental car D is made, as shown, so as to fit inside of the hollow drum or vessel A, and is pro-

vided with slots, for the pinions *e e* to work through, also provided with arms *g g*, by means of which it is suspended from the central shaft or tube E.

h h are bearings, in which the hollow shaft E works, and are secured in the centre of the ends or heads of the vessel A.

The central shaft E extends out somewhat beyond the ends of the vessel, and has the tubular or hollow posts K K securely fastened thereto, as well as the pipe or smoke-stack O.

It will readily be seen that the central shaft being hollow, it will serve the place of a flue, and conduct the smoke out into the stack or tube O.

L represents a beam, extending across and near the outer surface of the vessel, and is framed with the upright posts K K, and supports the pilot-house F, as fully shown.

M M represent arms, pivoted to the ends of the central shaft E, and which have framed therewith a cross or connecting-beam, N, to which is pivoted the rudder P, by means of a metallic strap or plate, O.

The rudder P is operated by means of cords or ropes, extending from the pilot house, as shown, or in any suitable manner.

It will be seen that the weight of the machinery and cargo will keep the car D always in nearly a horizontal position, the whole being suspended from or by means of the central shaft E, the advantages of which must be obvious.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The pilot-house F, when supported upon, and by means of the cross-beam L, posts K K, and central shaft E, as set forth.

2. The central hollow shaft E, in combination with the tube or smoke-stack O, as herein described.

3. The combination of the segmental car D with the central suspending shaft E and a revolving vessel, A, as and for the purpose specified.

4. The combination of the internal gear-wheels *b' b'* and pinions *e e*, when said pinions are suspended by the car D, as specified.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

GEORGE T. SNYDER.

Witnesses:

GEO. W. AIREY,

T. H. ALEXANDER.