

EDWARD P. RYDER.

Improvement in Toy Steam-Boats.

No. 126,414.

Patented May 7, 1872.

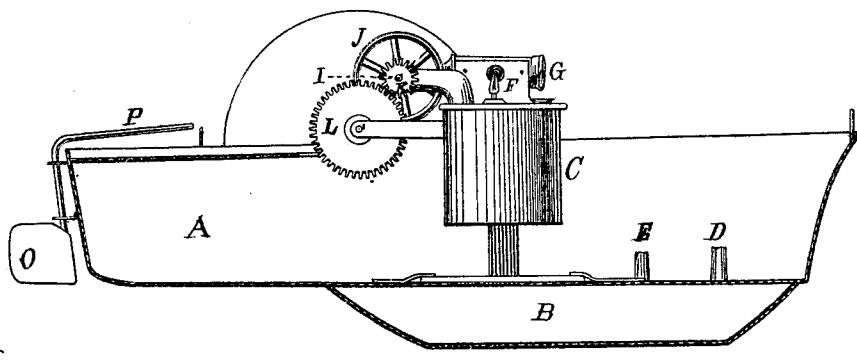


Fig. 1.

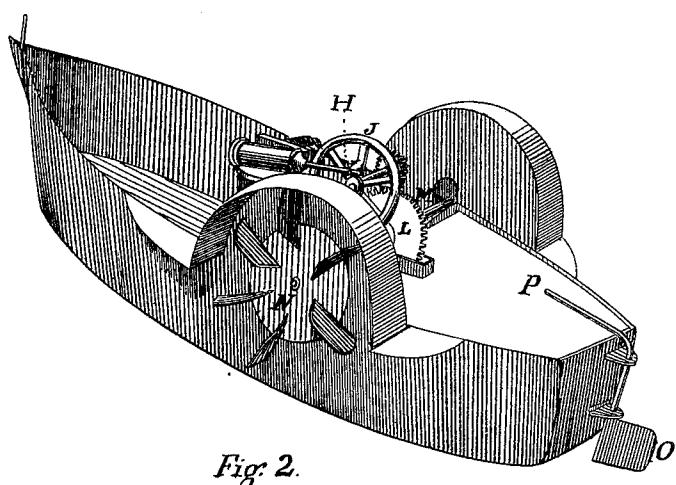


Fig. 2.

Osney, Done  
Michael Cork

Edward P. Ryder

## UNITED STATES PATENT OFFICE.

EDWARD P. RYDER, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN TOY STEAMBOATS.

Specification forming part of Letters Patent No. 126,414, dated May 7, 1872.

*To all whom it may concern:*

Be it known that I, EDWARD P. RYDER, of Brooklyn, Kings county, New York, have invented, made, and applied to use certain Improvements in the Construction of Toy Steam-boats; and that the following is a full, clear, and correct description of the same, reference being had to the accompanying drawing making part of this specification and to the letters of reference marked thereon, in which—

Figure 1 is a view of my toy steamboat, one side of the same being removed. Fig. 2 is a perspective elevation of the same.

In the drawing like parts of the invention are pointed out by the same letters of reference.

The nature of my invention consists in the construction, as more fully hereinafter set forth, of a toy steamboat; the object of the invention being to afford an instructive and amusing toy for children at a low cost.

To enable those skilled in the arts to make and use my invention, I will describe the construction and operation of the same.

A shows the hull of the boat, formed of metal, or of any suitable material, and B is the keel for the same, made hollow so that it may be used as a receptacle for the fluid or alcohol to be supplied to a wick inserted in a wick-tube placed below the boiler C. D and E show tubes communicating with the hollow keel B, to allow the same to be supplied with alcohol or fluid. C shows a boiler, placed about centrally in the hull A above the wick-tube just alluded to, and having secured upon its upper end the steam-chest F, provided with the cylinder G, piston H, and shaft I, upon which is secured a fly-wheel, J. The shaft I is extended beyond its frame to receive a pinion, K, which

gears into the cog-wheel L secured upon the shaft M, upon the ends of which the paddle-wheels N are attached. O shows the rudder, and P is the tiller for the same.

Such being the construction, the operation is as follows: The alcohol or fluid is supplied to the hollow keel B through the tube D or E, and a wick is inserted in the wick-tube, over which the boiler C is placed. The boiler C is supplied with water, and, the wick being ignited, steam is soon generated in the boiler C and enters the steam-chest F, whence, through ports in the chest, it is supplied to the cylinder, setting the piston-rod in operation. One end of the piston-rod is held upon the fly-wheel shaft I, upon the opposite end of which is secured the pinion K, gearing into the cog-wheel L secured upon the shaft M, to the ends of which the paddle-wheels N are attached. As the piston is operated it causes the shaft I to revolve, carrying with it the pinion K, through which motion is communicated to the cog-wheel L and shaft M, by which the paddle-wheels N are caused to revolve and propel the boat through the water.

Having now set forth my invention, what I claim as new is—

1. The combination, with the hull A, of the hollow keel B, as and for the purposes set forth.
2. The combination, with the paddle-wheels N and shaft M, of the cog-wheel L, pinion K, and engine, substantially as and for the purposes set forth.

EDWARD P. RYDER.

In presence of—

A. SIDNEY DOANE,  
Wm. HASTINGS.