

A. & E. BUCKMAN.

Improvement in Toy Steam-Boats.

No. 132,798.

Patented Nov. 5, 1872.

Fig. 1

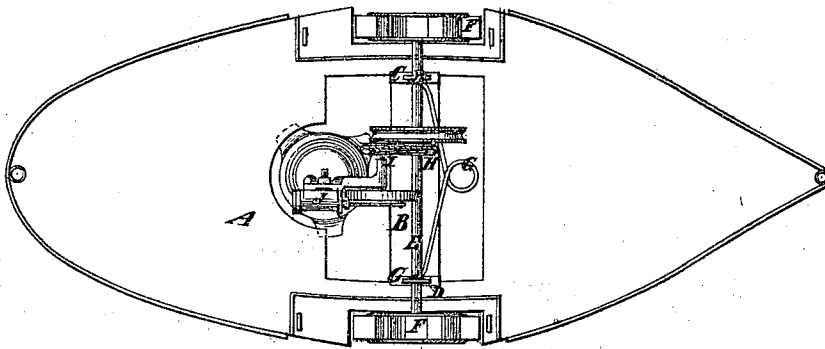
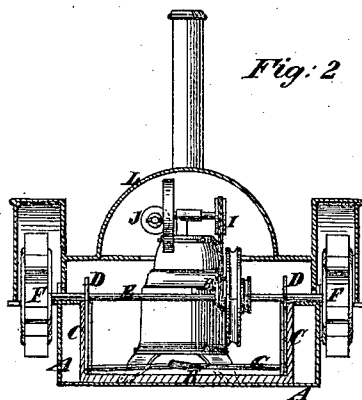


Fig: 2



Witnesses:
 Fred Hamer
 R. E. Kaibau

Alex Buckman
Edward Buckman

UNITED STATES PATENT OFFICE.

ALEXANDER BUCKMAN AND EDWARD BUCKMAN, OF BROOKLYN, N. Y.

IMPROVEMENT IN TOY STEAMBOATS.

Specification forming part of Letters Patent No. **132,798**, dated November 5, 1872; antedated November 2, 1872.

To all whom it may concern:

Be it known that we, ALEXANDER BUCKMAN and EDWARD BUCKMAN, both of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Toy Steamboats, of which the following is a specification:

This invention consists in a novel, cheap, and simple method of providing for the higher and lower adjustment of the bearings of the paddle-wheel shaft, for the purpose of either varying the dip of both paddle-wheels according to the load in the boat and its immersion in the water, or varying the dip of either paddle-wheel to make it correspond with the dip of the other.

In the accompanying drawing, Figure 1 is a plan or top view of a boat constructed according to our invention with an upper portion covering its interior removed, and Fig. 2 is a transverse section of the same.

Similar letters of reference indicate corresponding parts in both figures.

A is the hull of the boat, which is hollow, and may be made of sheet-iron, tin, or any other suitable material. B is a bed-piece, which is secured to the inside of the bottom of the boat amidships, and has extending from its ends standards C C, which are vertically grooved, and receive bearings D D of sheet metal for the shaft E of the paddle-wheels F F. These bearings consist of sheet-metal plates, and are capable of sliding up and down to adjust the dip of the paddle-wheels to the immersion of the hull of the boat, and they are secured in place by an intermediate spring, G,

whose ends bear against the bearings and cause them to bind in the grooves of the standards and so be retained in position. The spring consists simply of a piece of wire bent round in the middle to form a loop, the tendency of which to open forms the spring. The paddle-wheel shaft E has provided on it a pulley, H, which receives a belt from a pulley, I, on the shaft of a steam-engine, J, consisting of a single oscillating cylinder arranged on the top of a steam-boiler, under which a lamp is placed. L is a hood or covering, which covers the engine and gearing, and is provided with a smoke-stack, which gives a more natural appearance to the boat.

To adjust the dip of the paddle-wheels their shaft is taken hold of with the hand and raised or lowered, as may be necessary, and its bearings, which are shifted with it, are retained in place by the interposed spring.

In practice we shall perforate the deck and covering L, to provide for a good draft to the lamp, and also to prevent the interior of the boat from becoming too hot and the solder which secures its parts together being melted.

Claim.

The combination of the standards C C, the vertically-adjustable bearing-plates D D, and the interposed spring, substantially as and for the purpose set forth.

ALEX. BUCKMAN.
EDWARD BUCKMAN.

Witnesses:

FRED. HAYNES,
R. E. RABEAU.