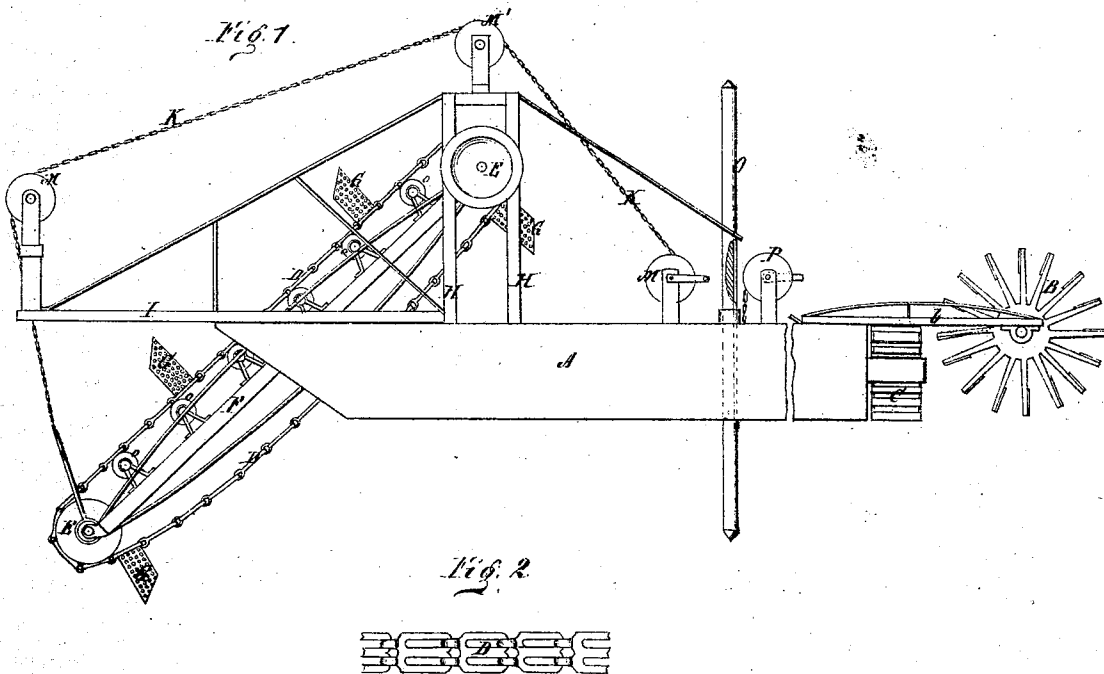


Edwin Platt.

117109

PATENTED JUL 18 1871

Dredge.



Witnesses:
H. J. Stick
Thos. D. D. Curran

Inventor:
Edwin Platt.
PER *Wm. P. C.*
Attorneys.

UNITED STATES PATENT OFFICE.

EDWIN PLATT, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN DREDGING-MACHINES.

Specification forming part of Letters Patent No. 117,109, dated July 18, 1871.

To all whom it may concern:

Be it known that I, EDWIN PLATT, of Charleston, in the county of Charleston and State of South Carolina, have invented a new and Improved Dredge; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 is a plan of the chain.

This invention relates to a dredging apparatus the lower end of which, when at work, rests always on the bottom of the body of water where it is employed, its upper end being connected with the boat, and the dredge having play enough to keep its lower end always on the bottom in all states of the tide; the apparatus being also provided with a staff for anchoring the boat, and with one wheel at the bow or stern of the boat for propelling her forward or backward, and with another wheel for turning the boat to either side.

Referring to the drawing, A is the dredging-boat. B is the wheel for propelling the boat forward or backward, located at the stern on a horizontal shaft that is mounted in bars *b* that extend horizontally from the boat. C is the wheel for turning the boat to either side, said wheel being mounted on a shaft that extends horizontally from the stern at right angles to the shaft of the wheel B. These two wheels enable the boat to be kept easily in any desired position, head to wind and tide, or otherwise, as may be expedient. An endless chain, D, running over drums E,

that are mounted at the ends of a frame, F, bears dredging-buckets G, composed wholly of perforated metal, which allow water to escape while retaining mud. The frame F is jointed at its upper end upon the shaft of the upper drum, and this shaft is mounted in boxes that are supported in standards H springing from the boat. Bars I project from the bow horizontally, one at each side of the frame F, a recess being made in the bow lengthwise of the boat for the dredging apparatus to rest in. The lifting-chain K runs over a drum, M, that is supported on the ends of the bars I, and over another drum, M', supported on a cross-bar that rests on the standards H. N is the windlass for winding up the chain K and thus elevating the lower end of the dredge. Rollers *o* are secured to the frame F for the chain to run over. O is an anchor-staff that runs down through an orifice in the boat, and is used for fastening the latter in any desired position. P is the windlass that raises and lowers the anchor-staff. The wheels B C are driven by engines in the boat, which also operate the windlass.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a dredging apparatus, the combination of boat A, anchor-staff O, wheel C, and elevator D E F G, made adjustable by cord or cords K and windlass, as shown and described.

EDWIN PLATT.

Witnesses:

R. S. CATHCART,
JAS. BRIDGE, Jr.