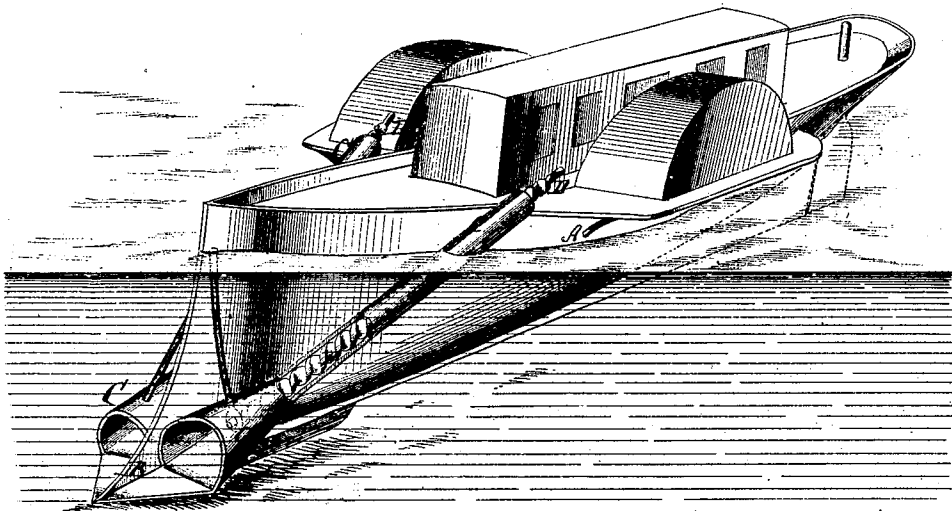


Morrison v Rose,

Dredger.

No. 104,981.

Patented July 5, 1870.



Witnesses:
Gustave Dütterich
Alex. F. Roberts

Inventor:
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PER *Morrison & Rose*
Attorneys.

United States Patent Office.

AMOS MORRISON AND RUFUS E. ROSE, OF NEW ORLEANS, LOUISIANA.

Letters Patent No. 104,981, dated July 5, 1870.

IMPROVEMENT IN SUBMARINE PLOWS.

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

To all whom it may concern:

Be it known that we, AMOS MORRISON and RUFUS E. ROSE, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and improved Submarine Plow; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The drawing represents a perspective view of our improved submarine plow.

This invention relates to a new construction of ship, for removing the earth from the bottoms of rivers, banks in harbors, &c., and gathering it in suitable receptacles, or scattering it, to be carried away by the currents.

The invention consists in the arrangement with the plow-share, formed on the lower part of the bow of the boat, of tubes and screws, for removing or elevating the earth taken up by the plow, as hereinafter described.

The boat A is constructed in such manner that it can be raised or lowered, at will, by discharging or taking in water ballast, and is provided with suitable propelling apparatus.

At the lower end of the bow, below the keel, is secured to it a plow-share, B, which is divided in the middle by an elevated ridge or cutter, to throw the earth which it works up to two sides.

C C are two tubes, secured to the sides of the boat

in inclined positions, so that their upper ends reach above the water-level, while their funnel-shaped lower ends are directly behind the plow-shares.

The earth taken in by the plow is worked into the tubes C, and, in the same, elevated by means of screws D D, which are revolved by suitable machinery from the boat. The earth is, thereby, as the boat progresses, elevated in continuous streams, and is, at the upper ends of the tubes, either returned to the water or dumped into receptacles to be carried away. If the earth is thrown into the water, it is, by the current, carried away, so as to thereby be removed from the bank.

This invention should not be confounded with a dredging-machine, which is stationary, while our boat operates only when in motion, to apply its own force to the displacement of the sand.

Having thus described our invention,

We claim as new and desire to secure by Letters Patent—

The arrangement with the double plow-share B, formed on the lower portion of the bow of the boat, of the inclined tubes C C, having funnel-shaped mouths, and provided with the screws D D, all as herein shown and described.

April 22, 1870.

AMOS MORRISON.
R. E. ROSE.

Witnesses:

R. C. RICHARDSON,
J. M. DAY.