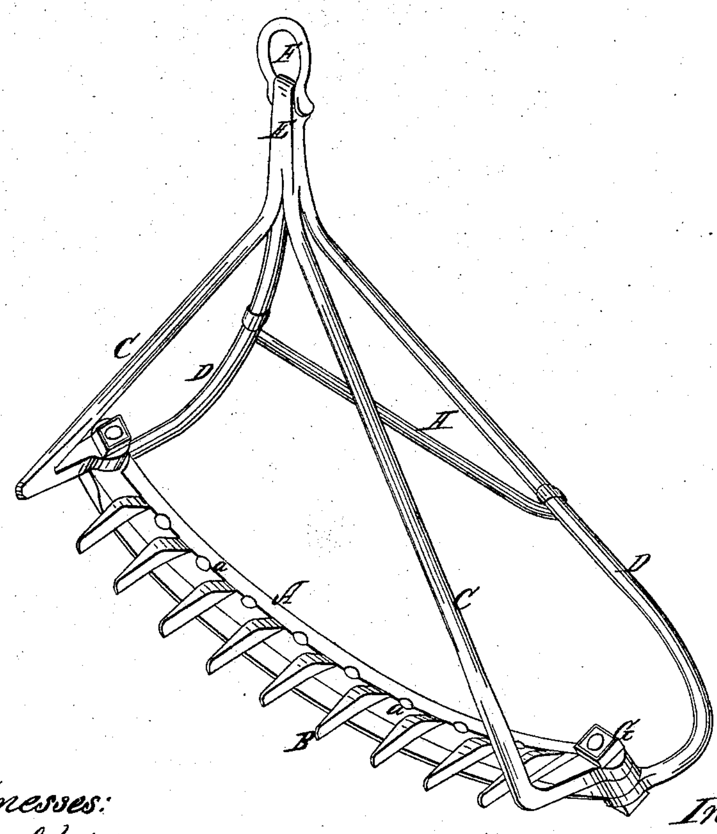
W. Belbin,

Oyster Dredge

No. 45,904. Patented Jan. 17, 1865.



Witnesses:
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by his Attys.
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AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

WM. BELBIN, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN OYSTER-DREDGES.

Specification forming part of Letters Patent No. **45,904**, dated January 17, 1865.

To all whom it may concern:

Be it known that I, WILLIAM BELBIN, of the city and county of Baltimore, in the State of Maryland, have invented a new and useful Improvement in Oyster-Dredgers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, which makes part of this specification, and which represents a view, in perspective, of my improved oyster-dredger.

It is the object of my invention so to construct an oyster-dredger that while its teeth are free to move unobstructedly over the oyster-beds it can also readily be hoisted over the stern of the boat without catching thereon; and to this end my improvement consists in constructing the front rods, which sustain the rake, with such a curvature and so combining them with the other parts of the dredger that they do not obstruct the passage of the rake-teeth over the oyster-beds, and at the same time carry the rake over the stern of the boat without permitting the teeth to catch upon the roller or boat, as hereinafter more fully shown.

The dredger shown in the accompanying drawing consists of a strong wrought-iron bar, A, curved in the arc of a circle of large radius, and having a series of rake-teeth, B, inserted into it on its upper side and projecting in front of the bar, dipping slightly forward, so as to pass under and rake up the oysters with greater certainty. The rake-bar A likewise has a row of holes, *a*, in it, in which to insert the rings to which the oyster-bag is attached.

The rake-bar is attached to a frame consisting of four wrought-iron rods, C D, uniting at their upper ends in a head or socket, E, having an eye in it. A ring-bolt or link, F, is pivoted to this head, so as to play freely back and forth, and to this link the drag rope or chain is attached.

The front rods, C, are straight from the head E nearly to the level of the rake-bar A, at which point they are flattened, as shown in the drawing, so as to present a sharp edge on the advancing side, and bent backward at a right angle, while the rear rods, D, are curved more gradually and to a greater extent than the front ones, and extend beneath the rake-bar A, which is placed between the ends of the front and rear rods, and the whole securely fastened together by a nut and screw, G, or a rivet. The two rear bars are likewise connected by a cross-brace, H.

From the improved form of the front rods, C, it readily will be seen that, while they in no wise obstruct the action of the teeth when the rake is in motion over the bottom, the projection of their curves at the sides of the dredger causes it easily to rise over the roller without permitting the teeth to catch thereon, and thus to deliver the oysters close to the stern of the boat without spilling any.

The dredger operates as follows: A bag to contain the oysters is secured to the back of the rake-bar A by rings in the holes *a*. A rope is attached to the link F and the dredger thrown overboard and dragged after the vessel, the rope passing over a roller on the taff-rail. As the dredger advances the teeth catch up the oysters, which pass back into the bag, and in case of encountering an obstacle the yielding of the link permits the rake to free itself more readily than it would otherwise do, and diminishes the liability of the rake to be broken, bent, or injured. In drawing up the dredger the front rods, C, slide over the roller and protect the rake-teeth from catching upon it, being made to project beyond the teeth especially for that purpose.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

The combination, in an oyster-dredger, of the rake-bar A, front rods, C, and rear rods, D, with the head E and swiveling link F, when the rods C are curved, constructed, and arranged as and for the purposes described.

In testimony whereof I have hereunto subscribed my name.

WILLIAM BELBIN.

Witnesses:

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