J. KEEFE.

Dredge.

No. 206,246 Patented July 23, 1878.

*Fig. 1.*

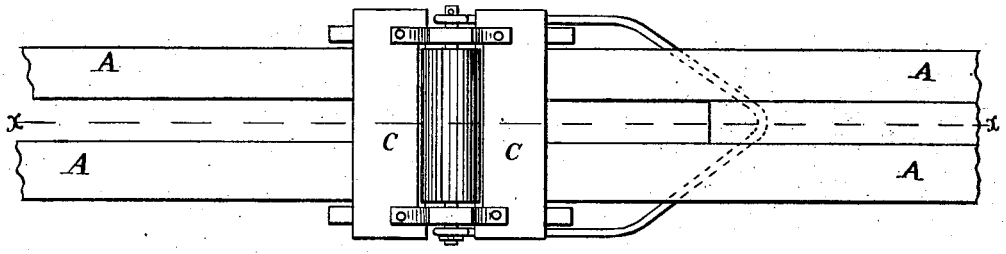
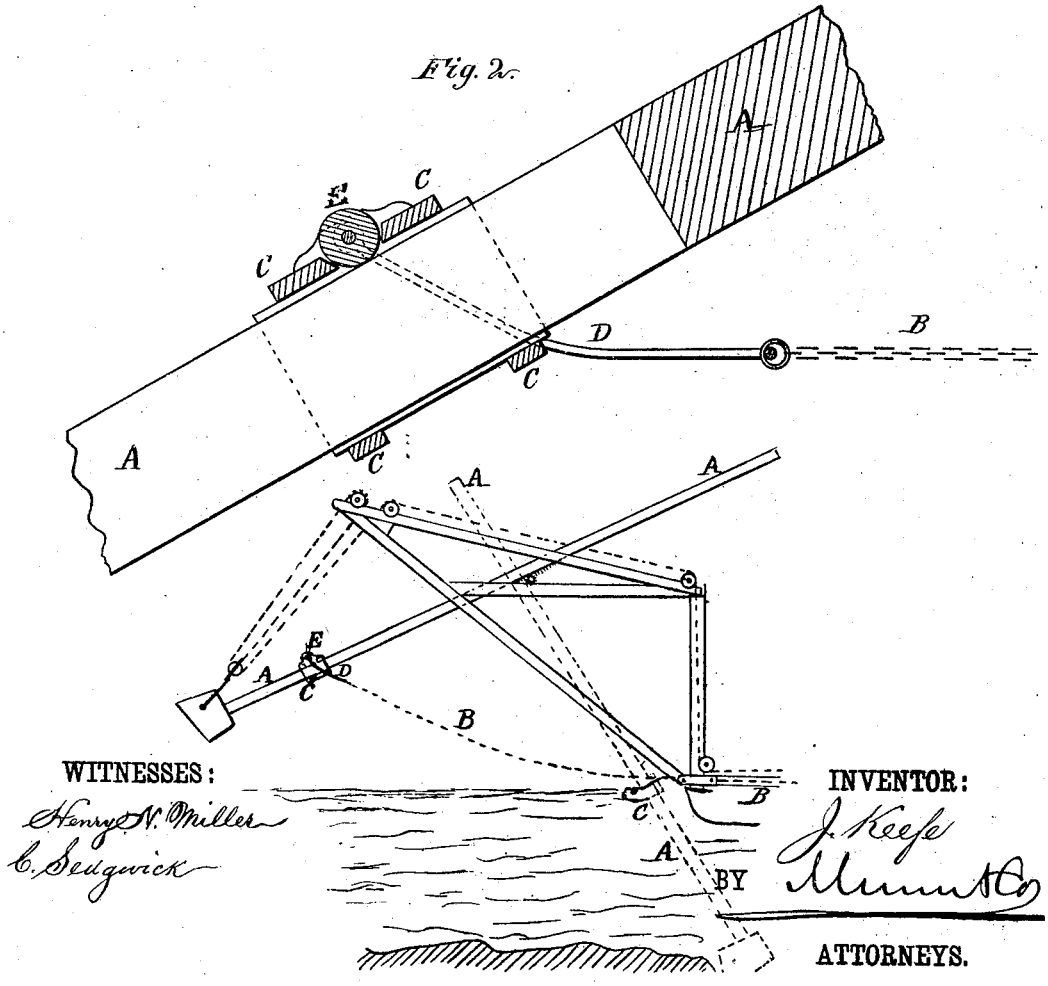



*Fig. 2.*




WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES KEEFE, OF PORT EADS, LOUISIANA.

## IMPROVEMENT IN DREDGES.

Specification forming part of Letters Patent No. **206,246**, dated July 23, 1878; application filed April 18, 1878.

*To all whom it may concern:*

Be it known that I, JAMES KEEFE, of Port Eads, in the parish of Plaquemines and State of Louisiana, have invented a new and useful Improvement in Dredges, of which the following is a specification:

Figure 1 is a front view of my improved device. Fig. 2 is a section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a detail view illustrating its use.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved fastening for connecting the backing-chain with the dipper-handle to enable the dipper to be lowered to the bottom at the desired angle without its being necessary to throw the drum out of gear.

The invention consists in the combination of the sliding sleeve and the bail with the dipper-handle and the backing-chain; and in the combination of the roller with the sliding sleeve, the bail, the dipper-handle, and the backing-chain, as hereinafter fully described.

A represents the dipper-handle of a dipper-dredge, which is connected with the crane, and is operated in the usual way.

B is the backing-chain, which draws the dipper back before it gets its load.

As heretofore used the backing-chain B has been attached to the handle A by a fixed fastening, and, when lowering the dipper in the desirable angle for dredging, the drum that held the backing-chain had to be thrown out of gear to allow the dipper to reach the bottom. The result was that the dipper would be carried forward by the current, being inclined to follow its own weight.

To remedy this I place a sliding sleeve, C, upon the handle A, and connect the backing-chain with it by means of a bail, D, pivoted to it.

With this construction the handle A slides through the sleeve C, and the dipper is allowed to reach the bottom under any angle and without the delay heretofore necessary.

The sleeve C may be constructed of wood, iron, brass, or any other material strong enough to resist the strain.

The movement of the sleeve C upon the handle A is facilitated by a friction-roller, E, pivoted in a slot in the forward side of the said sleeve, as shown in the drawings, and to the journals of which the ends of the bail D are pivoted. The sleeve, however, can be used without the friction-roller or with any other device that will give ease of movement.

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

1. The combination of the sliding sleeve C and the bail D with the dipper-handle A and the backing-chain B, substantially as herein shown and described.

2. The combination of the roller E with the sliding sleeve C, the bail D, the dipper-handle A, and the backing-chain B, substantially as herein shown and described.

JAMES KEEFE.

Witnesses:

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