I. A. KETCHAM.

Improvement in Oyster-Dredges.

No. 132,668. Patented Oct. 29, 1872.

Fig. 1.

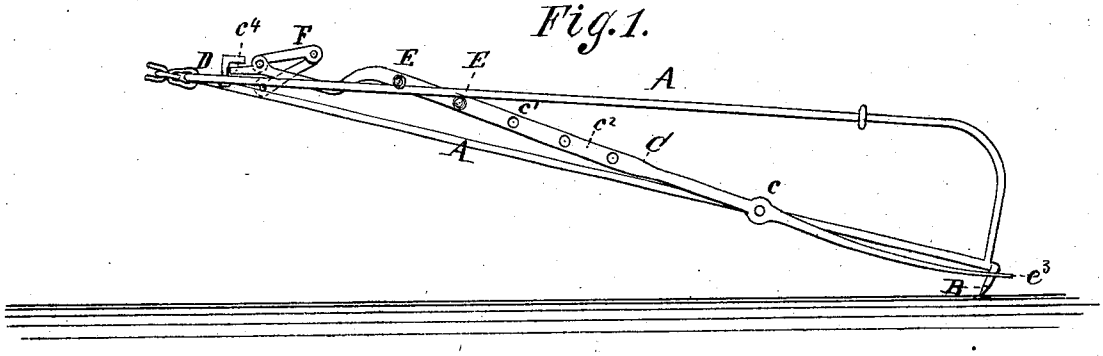
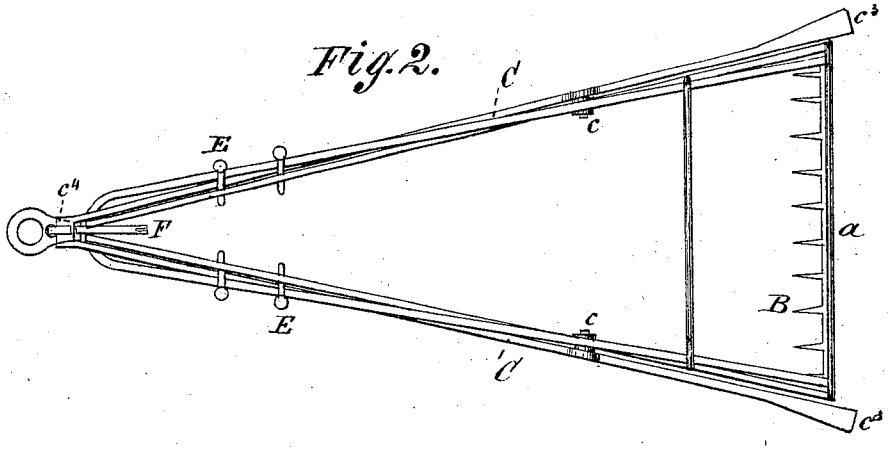


Fig. 2.



Witnesses:
G. Mattys.
C. A. Pettit

Inventor:
Isaac A. Ketcham
per Munn & Co
Attorneys.

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

ISAAC A. KETCHAM, OF BRESLAU, NEW YORK.

IMPROVEMENT IN OYSTER-DREDGES.

Specification forming part of Letters Patent No. **132,668**, dated October 29, 1872.

To all whom it may concern:

Be it known that I, ISAAC A. KETCHAM, of Breslau, in the county of Suffolk and State of New York, have invented an Improvement in Dredges or Machinery for Taking Oysters, Coal, or any sunken objects, of which the following is a specification:

The invention relates to dredges or machinery for taking oysters, coal, or other objects that lie upon the bottom of a stream, bay, or other body of water; and it consists in a lever-regulator, by which the teeth of the dredge are set at different lengths, according to the softness or hardness of the bottom, while, at the same time, said lever serves as the ordinary fender to clear the roller or side of ship when being taken on board.

In the drawing, Figure 1 is a side elevation, and Fig. 2 is a top view.

A represents the ordinary frame of a dredge, provided with teeth B on a cross-bar, *a*. C is the lever or regulator, fulcrumed at *c*, having a series of holes, c^1, in each of the arms C′ C, broadened at the ends c^3 c^3, and having the conjoined flat end c^4. D is a pivoted catch, that turns over the flat end c^4 when the whole length of teeth is needed or the fender is not in use. E E are pins, which, resting against the frame, confine the lever C at any point of adjustment. By a change in the location of these pins the lever may be made to regulate the length of teeth that operate upon the bottom. To the flat end c^3 may be attached a toggle-lever, F.

When the dredge is being taken on board ship and over the roller the end of lever is released, the toggle-arms straightened, and the teeth allowed to pass.

It will thus be seen that by this lever I can not only set the teeth from full length to that of a simple scraper, but any length required, (which effect cannot be produced in any dredge now known to the public,) and can enable the dredge-teeth to clear the ship-side or roller.

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

The lever C fulcrumed in the frame A, and adapted to be used on machines for dredging coal or other sunken objects, as and for the purpose described.

ISAAC A. KETCHAM.

Witnesses:
W. GAUCKLER,
G. GUDE.