

(No Model.)

A. D. POST.
OYSTER DREDGE WINDER.

No. 496,061.

Patented Apr. 25, 1893.

Fig. 1.

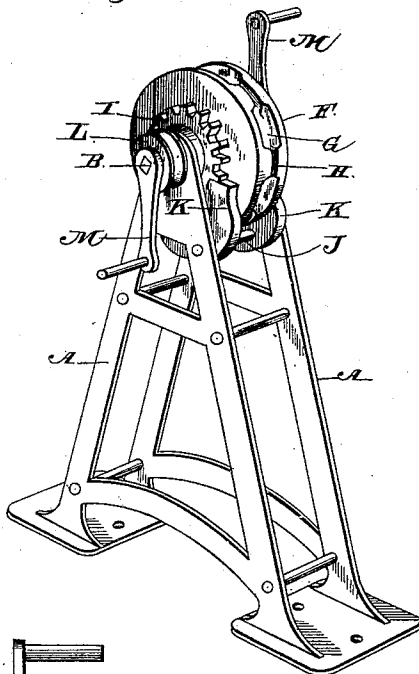


Fig. 2.

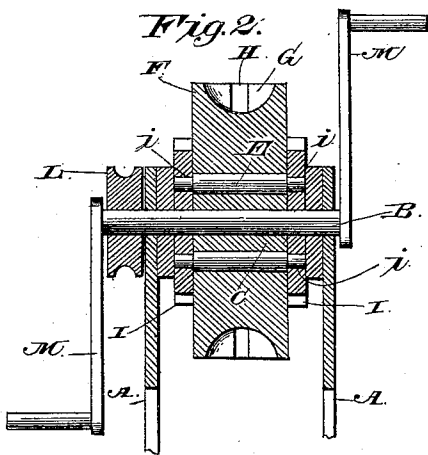
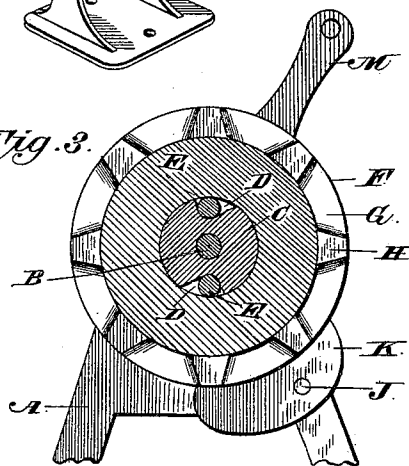


Fig. 3.



Witnesses

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ANDREW DECKER POST, OF KEYPORT, NEW JERSEY.

OYSTER-DREDGE WINDER.

SPECIFICATION forming part of Letters Patent No. 496,061, dated April 25, 1893.

Application filed January 11, 1893. Serial No. 458,052. (No model.)

To all whom it may concern:

Be it known that I, ANDREW DECKER POST, a citizen of the United States, residing at Keyport, in the county of Monmouth and State of New Jersey, have invented a new and useful Oyster-Dredge Winder, of which the following is a specification.

This invention relates to dredge winders; and it has for its object to provide an improved winding device of this character especially adapted for use in connection with oyster dredges, and to this end it is the main object of this invention to do away with the cumbersome and heavy rope windlasses ordinarily employed in this connection, and substitute a light and simple hoisting device used in connection with chains instead of rope, and also to combine therewith means for using rope if necessary.

With these and many other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a dredge winder constructed in accordance with my invention. Fig. 2 is a vertical transverse sectional view of the same. Fig. 3 is a vertical longitudinal sectional view of the same.

Referring to the accompanying drawings:—A A represent the side frames supporting standards which accommodate the various parts of the winder, and are adapted to be suitably secured to the deck of the boat employed or in any suitable location according to its use. Journalled in the upper ends of the side frame pieces is the horizontal windingshaft B. The said shaft carries the central clutch disk C securely keyed thereon and provided with the opposite inclined notches D, which are adapted to receive and accommodate the elongated friction rollers E mounted in said notches. Working over said clutch disk C and inclosing the friction rollers E in the notches in said disk, is the chain wheel F. The said chain wheel F is provided on its periphery with a series of link recesses G, connected by the communicating slots H, which thus allow a chain to snugly fit in the periphery thereof,

and which chain will be hoisted or lowered according to the direction of travel of said wheel. Loosely mounted on the shaft B on each side of the chain wheel F are the opposite cog wheels I. The said cog wheels are provided with the opposite bearings i, which receive the opposite projecting ends of the opposite friction rollers E. Mounted loosely upon the rod J secured in the side frame pieces A are the opposite weighted pawls K, which automatically engage the cog wheels I, and prevent the same from turning backward. Secured to one end of the shaft B is the rope spool or drum L, which in the event of the parting of the chain employed, may be used, by winding a rope therearound and hoisting in the usual manner. Opposite crank handles M are connected to opposite ends of the shaft B and provide means for the turning of the same. It will now be readily seen that by passing a chain over the top of the chain wheel F, and allowing the same to fall upon the deck, while the other end is connected with the dredge, and by turning the said shaft in one direction, that the notched clutch disk will turn away from the friction rollers E working in the notches therein and cause the same to frictionally engage the inner wall of the chain wheel working thereover, and carry the same around and cause the dredge to be hoisted. By simply stopping the turning of the shaft, the weighted pawls will check the backward movement of the cog wheels, which will hold the friction rollers steady until the same fall back into the inclined notches, and thus automatically release the chain wheel and allow the dredge to lower of itself. This operation is particularly essential in devices of this character to allow the dredge to be repeatedly and successively dropped back into the water for cleaning the oysters, which is easily done without any strain or jar upon the men operating the winder.

The construction of winder herein described greatly lessens the labor necessary for operating the ordinary dredge winders, and inasmuch as the chain is closely geared with the device, a continued and equal power is exerted from the time the dredge starts from the bottom until it reaches the deck. The ordinary spool or drum winder loses its power

as the dredge starts from the bottom, and when the dredge reaches the top of the water the spool or drum is full of rope and the leverage power is consequently small, necessitating extra labor to haul the dredge on deck. 5 As noted, the herein described winder is particularly adapted for washing oysters in a manner described by successively tripping the dredge. The winder is so geared that it 10 drops itself and is easily caught without any undue jar or strain. The said winder also occupies but a small space and gives a better opportunity for the same to be worked.

It is to be understood that changes in the 15 form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what 20 I claim, and desire to secure by Letters Patent, is—

1. In a dredge winder, the combination, with a supporting frame, of a winding shaft journaled in the upper ends of said frame, a clutch 25 disk keyed to said shaft and provided with inclined notches, a chain wheel loosely fitting over said clutch disk, cog wheels loosely mounted on said shaft on each side of said chain wheel, and friction rollers having their 30 ends loosely engaging the cog wheels and working in said notches, substantially as set forth.

2. In a dredge winder, the combination, with

a supporting frame, of a driveshaft journaled in the upper ends of said frame, a central 35 clutch disk mounted upon said shaft and provided with opposite inclined notches, a chain wheel loosely fitted over said clutch disk, cog wheels loosely mounted on said shaft on opposite sides of said chain wheel, opposite friction 40 rollers working in said inclined notches and having their ends loosely connected with the cog wheels, weighted automatic pawls engaging said cog wheels, and a supplemental rope spool or drum mounted upon one end of 45 said shaft, substantially as set forth.

3. In a dredge winder, the combination, with a supporting frame, of a drive shaft journaled in the said frame, a clutch disk mounted upon 50 said shaft and provided with opposite inclined notches, a chain wheel loosely fitted over said clutch disk, cog wheels loosely mounted on said shaft on opposite sides of 55 said chain wheel, opposite friction rollers working in said inclined notches and having their ends loosely connected with the cog wheels, and weighted automatic pawls engaging said cog wheels, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 60 the presence of two witnesses.

ANDREW DECKER POST.

Witnesses:

A. H. BEDLE,
WM. E. BEDLE.