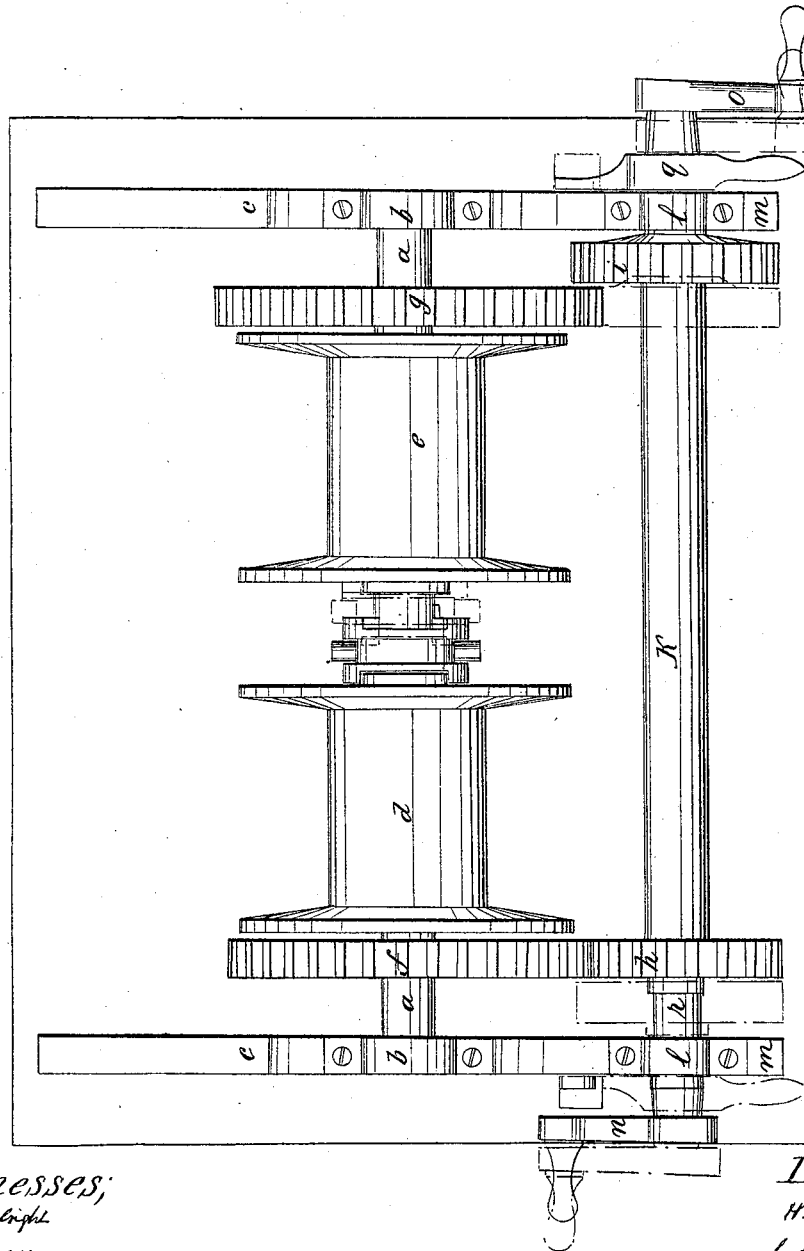


*H. S. Lawson,*

*Windlass.*

*N<sup>o</sup> 46,912.*

*Patented Mar 21, 1865.*



*Witnesses;*  
*Goldsmith*  
*J. Smith*

*Inventor;*  
*H. S. Lawson*  
*by Atty J. P. Coates*

# UNITED STATES PATENT OFFICE.

HENRY S. LAWSON, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN WINDERS FOR OYSTER-DREDGES.

Specification forming part of Letters Patent No. 46,912, dated March 21, 1865.

*To all whom it may concern:*

Be it known that I, HENRY S. LAWSON, of the city of Baltimore, in the State of Maryland, have invented a certain new and useful Improvement in Winders for Drawing in and Elevating Oyster-Dredges; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the marks and letters thereon.

The winder now generally used on board of vessels when engaged in dredging for oysters has but one shaft, to each end of which a crank is attached. In order to allow of several men working the winder, as is required, the handle of the crank is long, and necessarily occupies considerable space. The application of the power of the men thus to the shaft of the winder being direct is the least economical way of applying such power, and subjects the men to accidents by strain and otherwise when any sudden or excessive force comes upon the winder. Serious accidents have occurred to the men employed on board of dredging-vessels while using the long-handed winder.

My invention has for its object the construction of a winder that shall be safer, worked with a lesser number of men, and have a more economical application of power than the winder now generally used.

The drawing forming part of this specification represents by a top view my improved winder, which is made up of a reel-shaft, *a*, supported in proper bearings, *b*, on top of the frame *c*, which reel-shaft has on it two reels, *d* and *e*, with a clutch between them, having an operating-lever pivoted to a bar below, or being otherwise suitably arranged and affixed to some part of the frame, so that the one reel or the other may be operated by the crank-shaft—the reels being loose upon the reel-shaft except when held by the clutch—the clutch being of that kind usually known as the “shaft-clutch,” rotating with the shaft and sliding on it through the usual means, a feather on the shaft and a slot in the inner surface of the clutch. Near each end of the shaft *a*, and affixed thereto, is a cog-wheel, *f* and *g*, gearing into pinions *h* and *i* on the crank-shaft *k*. Crank-shaft *k* has its bearings *l* in a projecting part, *m*, of the frame, with a

crank and handle, *n* and *o*, at each end. Near each end of the crank-shaft for a short distance this shaft is contracted in its diameter, as indicated at *p*, so that this shaft can be slid in its bearings, and the one or the other end of the crank-shaft and the reel-shaft be by their respective wheels and pinions geared so as to operate the one or the other reel. A curved bar, *q*, hinged to the frame, will fit into the space or recess made by the lessened diameter of the crank-shaft and prevent the shaft from sliding. A bar is shown on each side of the frame of the winder, and the two different conditions of the crank-shaft, being geared to the one or the other reel and the one or the other reel being clutched to the reel-shaft, are indicated by the red and the black lines of the drawings.

This arrangement of the reels allows of the one reel being used to operate the dredge from the bow or fore part of the vessel, and the other reel being used to operate the dredge from the stern or back part of the vessel, and of the throwing of the entire force moving the crank-shaft upon the one reel.

This arrangement of the crank shaft and the reel shaft will require a lesser number of men to perform the same duty and exercise the same power than the winder now in use and heretofore named, while the men can better control the reel-shaft.

In case brakes are used upon the winder, they will act more promptly and efficiently through the crank-shaft as here arranged in relation to the reel-shaft than if applied directly to the shaft of the winder, as heretofore employed.

What I claim as my invention, and desire to secure by Letters Patent as an improvement in winders for drawing in and elevating oyster-dredges, is—

The arrangement of the reel-shaft and reels with the crank-shaft and cranks, the whole being constructed and susceptible of being operated as herein set forth.

This specification signed this 15th day of December, 1864.

H. S. LAWSON.

Witnesses:

THOS. T. EVERETT,  
J. W. MOHLER.