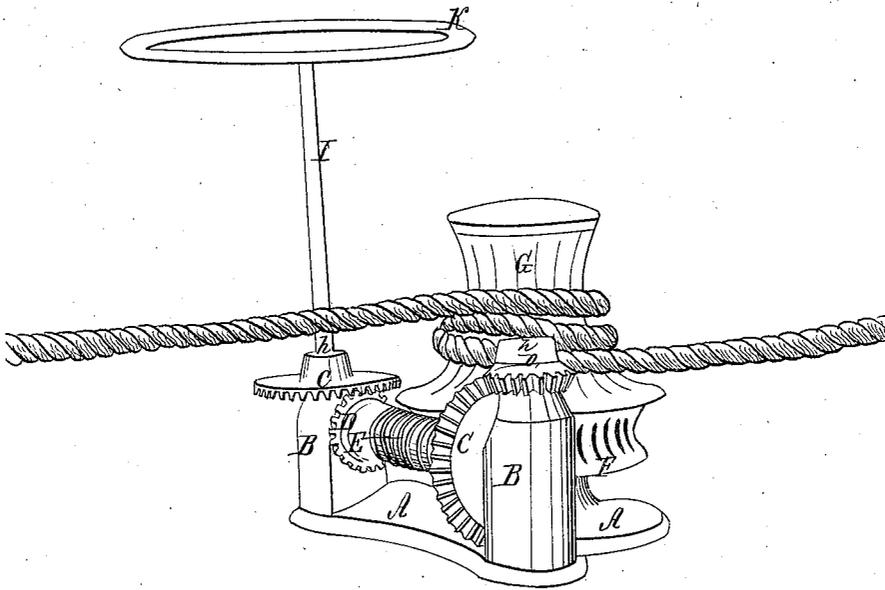


I. G. Morgan,

Windlass.

N^o 4,0352.

Patented Oct. 20, 1863.



Witnesses;

J. J. Logan

A. P. Dinsmore

Inventor;

I. G. Morgan

UNITED STATES PATENT OFFICE.

ISAAC G. MORGAN, OF ITHACA, NEW YORK.

IMPROVED CAPSTAN OR WINDLASS.

Specification forming part of Letters Patent No. **40,352**, dated October 20, 1863.

To all whom it may concern:

Be it known that I, ISAAC G. MORGAN, of the town of Ithaca, in the county of Tompkins and State of New York, have invented a new and useful machine for the working of a ship's capstan or boat-windlass or ship's rudder, or any other machine where great power is required; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, which drawing is a perspective view of said machine, in which—

A A is the bed-plate of the machine. B B are standards supporting the screw and bevel-wheels. C C are large bevel-wheels. D D are small bevel-wheels. E is the screw which works in the endless nut F of the capstan. F is the endless nut in the capstan. G is the capstan; *h h*, sockets in which the hand-bar or shaft I is set; I, hand-bar or shaft; K, hand-wheel.

The machine is operated by the use of the hand-wheel K, thus turning the bevel-wheels, screw, and capstan. By inserting the shaft I in the socket *h* of the bevel-wheel C, velocity is obtained. By inserting the same shaft I in the socket *h'* of the bevel-wheel D, power is obtained.

By placing the machine in a horizontal position, it can be used for a windlass or steering-gear.

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

The application of the screw and endless nut, in connection with the bevel-wheels, socket-bar, and hand-wheel to a ship's capstan, boat windlass, or rudder, or to any machine where great power is required, substantially as set forth and described, procuring power on the one hand and velocity on the other.

I. G. MORGAN.

Witnesses:

MARCUS LYON,
S. B. BEERS.