(No Model.)

R. W. WONSON.

WINDLASS OPERATIVE MECHANISM.

No. 435,128. Patented Aug. 26, 1890.

Fig. 1.

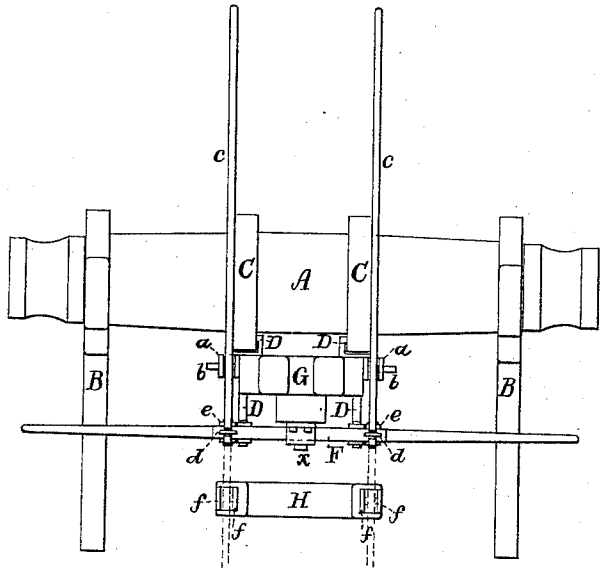


Fig. 3.

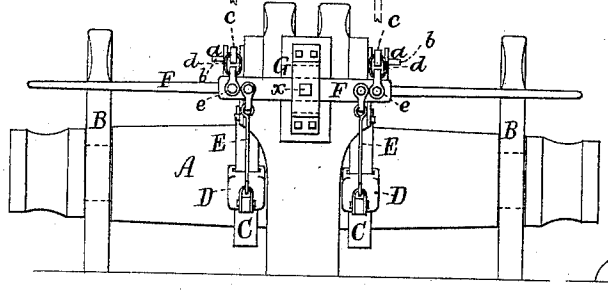
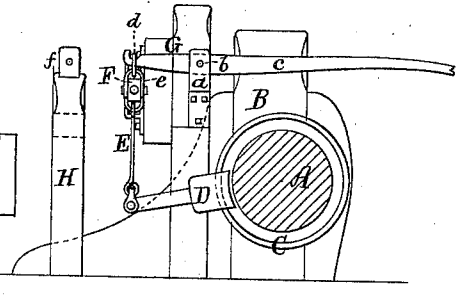


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

ROGER W. WONSON, OF GLOUCESTER, MASSACHUSETTS.

WINDLASS OPERATIVE MECHANISM.

SPECIFICATION forming part of Letters Patent No. 435,128, dated August 26, 1890.

Application filed March 27, 1890. Serial No. 345,552. (No model.)

To all whom it may concern:

Be it known that I, ROGER W. WONSON, a citizen of the United States, residing at Gloucester, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Windlass Operative Mechanism; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a plan or top view, Fig. 2 a transverse section, and Fig. 3 a side elevation, of a windlass provided with my improvement.

The object of my improvement is to increase the efficiency of the windlass of a navigable vessel, or provide it with means that will admit of the employment of a larger number of men to operate the same than heretofore.

The nature of my invention is defined in the claims hereinafter presented.

In the drawings, A represents a windlass journaled in checks or standards B B, said windlass being shown as provided with purchase-wheels C C, which are acted on by nipping-levers D D. The latter in descending move freely round on the said wheels. The said levers are connected by links E E to the brake F, pivoted to the bitt-head G at *x*, and the levers D D, when raised by the said brake, bite alternately upon the purchase-wheels and turn the windlass round in its bearings.

The parts thus far described are those now in use on navigable vessels, and I will now proceed to explain the improvements made be me to increase the efficiency and power of the windlass.

To opposite sides of the bitt-head G are secured bearings or ears *a a*, to which are fulcrumed at *g* the levers *c c*, each lever extending over and beyond the windlass, as shown, and being detachably connected near the end of its shorter arm by a link *d* and clevis *e* to the brake F. This arrangement of the levers *c c* is adopted when there is not sufficient room forward of the windlass to work them, but when the windlass is located far enough away or back from the bows of the vessel to admit of said levers being placed forward of the windlass, I erect on the deck a standard H provided with ears *f f*, to which the levers *c c* are fulcrumed (see dotted lines in Fig. 1) instead of to the bitt-head. Thus it will be seen that by re-enforcing the brake F by the levers *c c*, greatly-increased power can be applied to the mechanism for operating the windlass by extending the longer arms of said levers rearward and over the windlass, and by the same number of men that heretofore have usually been employed to operate the windlass by the said brake, for the reason that the men are obliged to stand farther from the fulcrum than heretofore, and means are provided for the employment of an additional number of men when required, which under the previous arrangement cannot get into position to exert their force on the brake.

I make no claim to anything shown in United States patent, No. 401,316, dated April 9, 1889. Therefore

What I claim is—

1. In a windlass operative mechanism, the levers *c c*, fulcrumed to the bitt-head, their shorter arms being connected to the brake, and their longer arms extended rearward and over the windlass, as and for the purpose explained.

2. In a windlass operative mechanism, the standard H, the ears fixed thereto, and the levers fulcrumed to said ears, the ends of the shorter arms of said levers being connected to the brake, as and for the purpose explained.

3. In a windlass operative mechanism, the levers *c c*, fulcrumed to a support arranged above or higher than the windlass, the shorter arms of said levers being connected to the brake, and their longer arms being extended aft and over the windlass, as and for the purpose explained.

In testimony whereof I affix my signature in presence of two witnesses.

ROGER W. WONSON.

Witnesses:
FRANK E. SMOTHERN,
CYRUS STORY.