T. W. HYDE.
WINDLASS.

No. 192,263. Patented June 19, 1877.

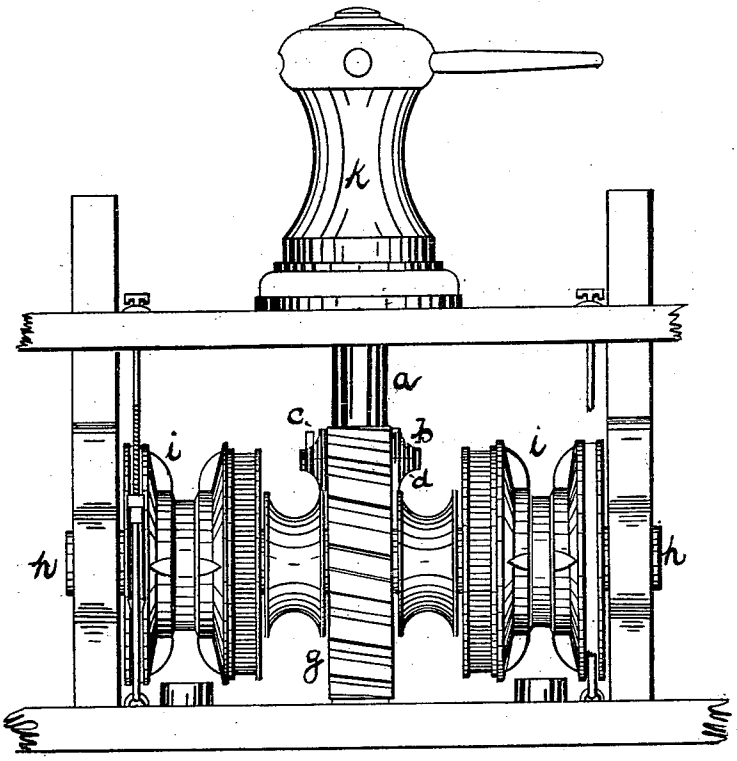


Fig. 1.

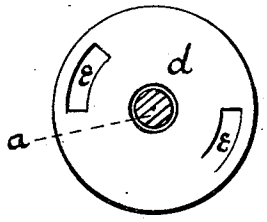


Fig. 4.

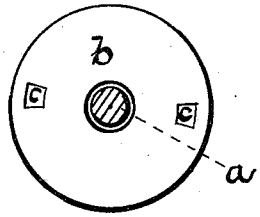


Fig. 3.

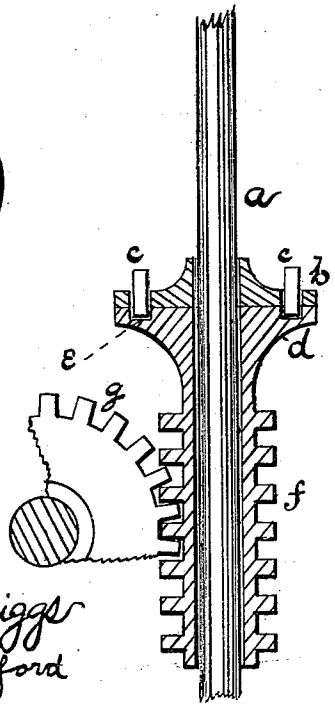


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS W. HYDE, OF BATH, MAINE.

IMPROVEMENT IN WINDLASSES.

Specification forming part of Letters Patent No. **192,263**, dated June 19, 1877; application filed May 4, 1877.

To all whom it may concern:

Be it known that I, THOMAS W. HYDE, of Bath, in the county of Sagadahoc and State of Maine, have invented certain new and useful Improvements in Windlasses and Capstans; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains 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 shows capstan and windlass. Fig. 2 shows part of main shaft, screw, and gear. Fig. 3 is a plan of pawl-disk. Fig. 4 is a plan of the ratchet-plate.

Same letters show like parts.

The object of my invention is the production of a windlass-capstan so arranged and constructed that when reversed it can be used separate from the windlass and without operating the same.

The subject-matter of this invention is the combination of devices used to accomplish this purpose.

This combination is composed of a shaft which is operated by the capstan, a screw which is loose on the said shaft, a ratchet-plate, a pawl-disk, certain pawls, and the capstan itself.

a is the main shaft, which is rotated by the turning of the capstan. Beneath the deck of the vessel there is rigidly attached to the said shaft the pawl-disk *b*. This disk has pawls *c*, which move up and down in apertures in the disk. This disk lies on a ratchet-plate, *d*, and the ratchet-plate has certain indentations on its upper face, which on one side are in the form of inclined planes, and on the other are vertical or have vertical edges, as shown in the drawings at *e*. The screw *f* is only rotated when the capstan is moved in one direction, which movement has the effect to bring the pawls *c* against the vertical edges or faces of the indentations on the ratchet-plate *d*, and so force the said plate around with the pawl-disk.

The screw *f* matches the gear *g*, by which the shaft *h* is rotated. On this shaft are the wild-cat wheels *i*, upon which the cable is wound. When the capstan is moved in the other direction, the pawls move over the indentations on the ratchet-plate on the inclined sides, and so do not move the plate and screw *f*.

The object and advantage of this arrangement are, that the capstan can be used for other purposes on the ship besides rotating the windlass, and without affecting the windlass when so used. I am aware that this object has been achieved by a second head loose on the capstan-shaft.

It will be perceived, however, that I produce the desired result and obtain the advantage of separating the movement of the capstan from that of the windlass, when I wish, by the direction in which I move the capstan.

The capstan is seen at *k*. Other parts of the windlass are shown in the drawings, but not referred to in the specification, because not the subject of a claim.

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

The combination of the screw *f*, which is loose on the shaft *a* and has the ratchet-plate *d*, with the pawl-disk *b*, pawls *c*, and the capstan *k*, operating as herein described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOS. W. HYDE.

Witnesses:
J. F. HAYDE,
E. H. JANETT.