(No Model.)

J. A. WHITING.

SHIP'S WINDLASS.

No. 304,152. Patented Aug. 26, 1884.

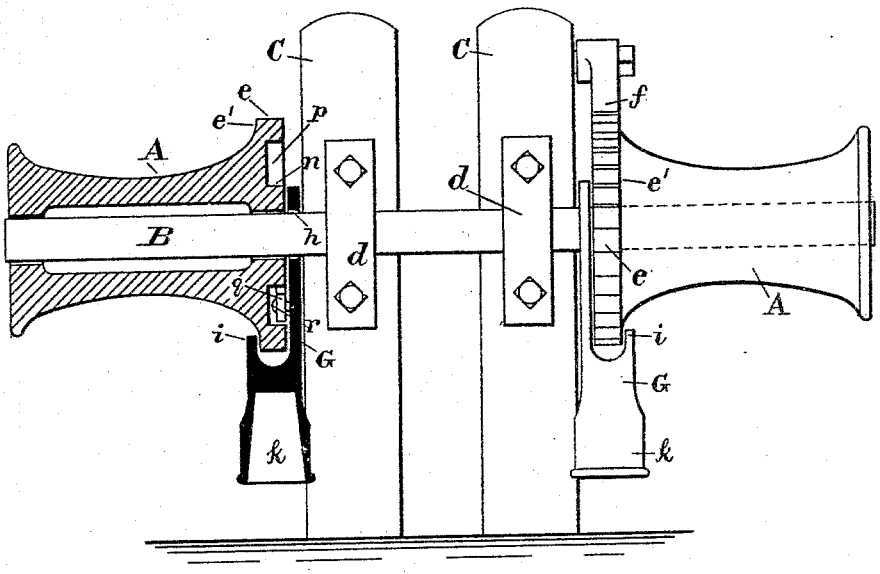

Fig. 1.

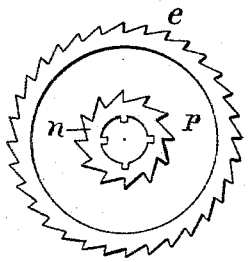

Fig. 2.

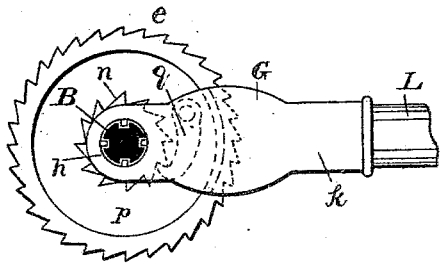

Fig. 3.

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UNITED STATES PATENT OFFICE.

JAMES A. WHITING, OF BALTIMORE, MARYLAND.

SHIP'S WINDLASS.

SPECIFICATION forming part of Letters Patent No. 304,152, dated August 26, 1884.

Application filed April 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. WHITING, a citizen of the United States, residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Ships' Windlasses, of which the following is a specification.

My invention relates to certain improvements in ships' windlasses, which will be described, and then claimed.

In the accompanying drawings, Figure 1 is an elevation of the windlass. Fig. 2 is a view showing the recessed head of the concave winding-drum. Fig. 3 is a view showing the recessed head of the winding-drum and the lever with its hook-pawl rotating the said drum.

The letter A designates the concaved winding-drum; B, the horizontal shaft on which it is mounted, as shown on the same shaft; C, the cheeks or standards on which are the bearings *d* for shaft. The concave winding-drum has on the perimeter of its largest head ratchet-teeth *e*, with which a drop-pawl, *f*, engages to prevent backward rotation. A lever, G, has near its end a round hole, *h*, which takes about the horizontal shaft B, and thereby it is pivoted on the said shaft close to the end of the drum. This lever also has a flange, *i*, which straddles or takes on the inner side *e'* of the ratchet-teeth rim, and the lever has a socket, *k*, for the insertion of a hand-spike, L.

The foregoing parts are of ordinary construction; and my improvement consists in recessing a small ratchet-wheel, *n*, in the end of the large head, which adjoins the standard, and providing an annular space or recess, *p*, around the outside of said small wheel. To work in connection with this small ratchet-wheel, a hook-pawl, *q*, is pivoted by a pin, *r*, on the side of the lever G, near its pivot-hole *h*. It will be seen the hook-pawl projects from the side of the lever and occupies the space or recess *p*, in the end of the large head, and its hook engages with the small ratchet-wheel. The advantage of this construction is that the lever G is more effective because its hook-pawl takes hold close to the axis of the winding-drum, and at the same time as this is effected by recessing the small ratchet-wheel in that end of the drum which is next to the standard, and, providing an annular space for the hook-pawl, the device requires less room and does not add to the cost.

It will be seen the small ratchet-wheel *n* on which the lever-pawl acts is at the same end of the windlass-drum as the ratchet *e*, on which the drop-pawl acts. By this construction room is economized.

I do not claim to have invented a recessed windlass-drum with a ratchet therein, but claim only the construction and arrangement of parts, as hereinafter stated.

Having described my invention, I claim and desire to secure by Letters Patent—

The herein-described windlass, consisting of the standard C, horizontal shaft B, windlass-drums having, on the perimeter nearest the said standard, ratchet-teeth *e*, and a pawl, *f*, pivoted on the standard, engaging with said teeth, a recess in the drum-head next to the standard, a small ratchet-wheel, *n*, on the shaft within the recess, with an annular space, *p*, around the outside of said small ratchet-wheel, and a lever, G, pivoted on the shaft between the drum and standard, and provided with a pawl which occupies the annular space, as set forth.

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

JAMES A. WHITING.

Witnesses:
JNO. T. MADDOX,
JNO. E. MORRIS.