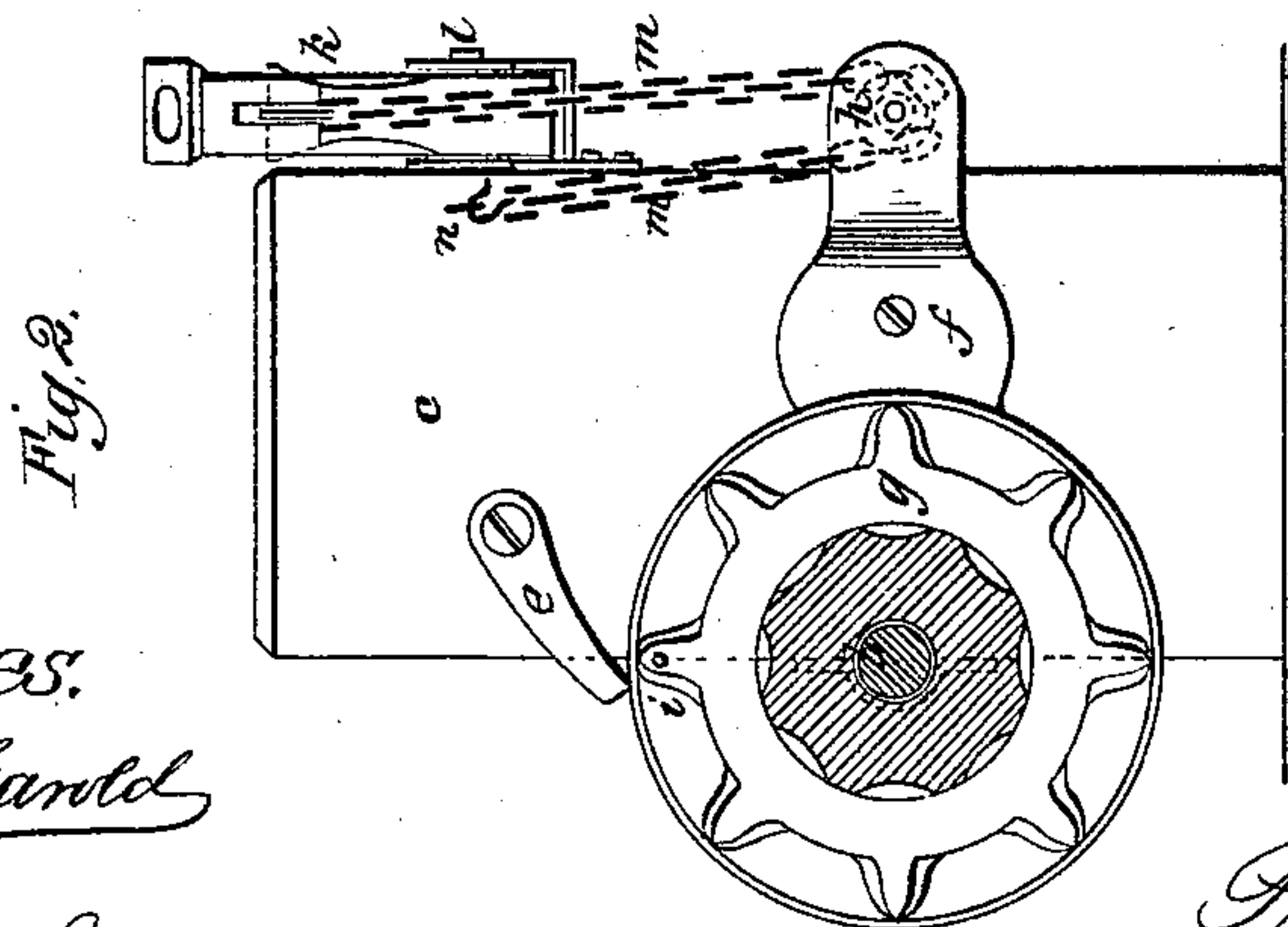
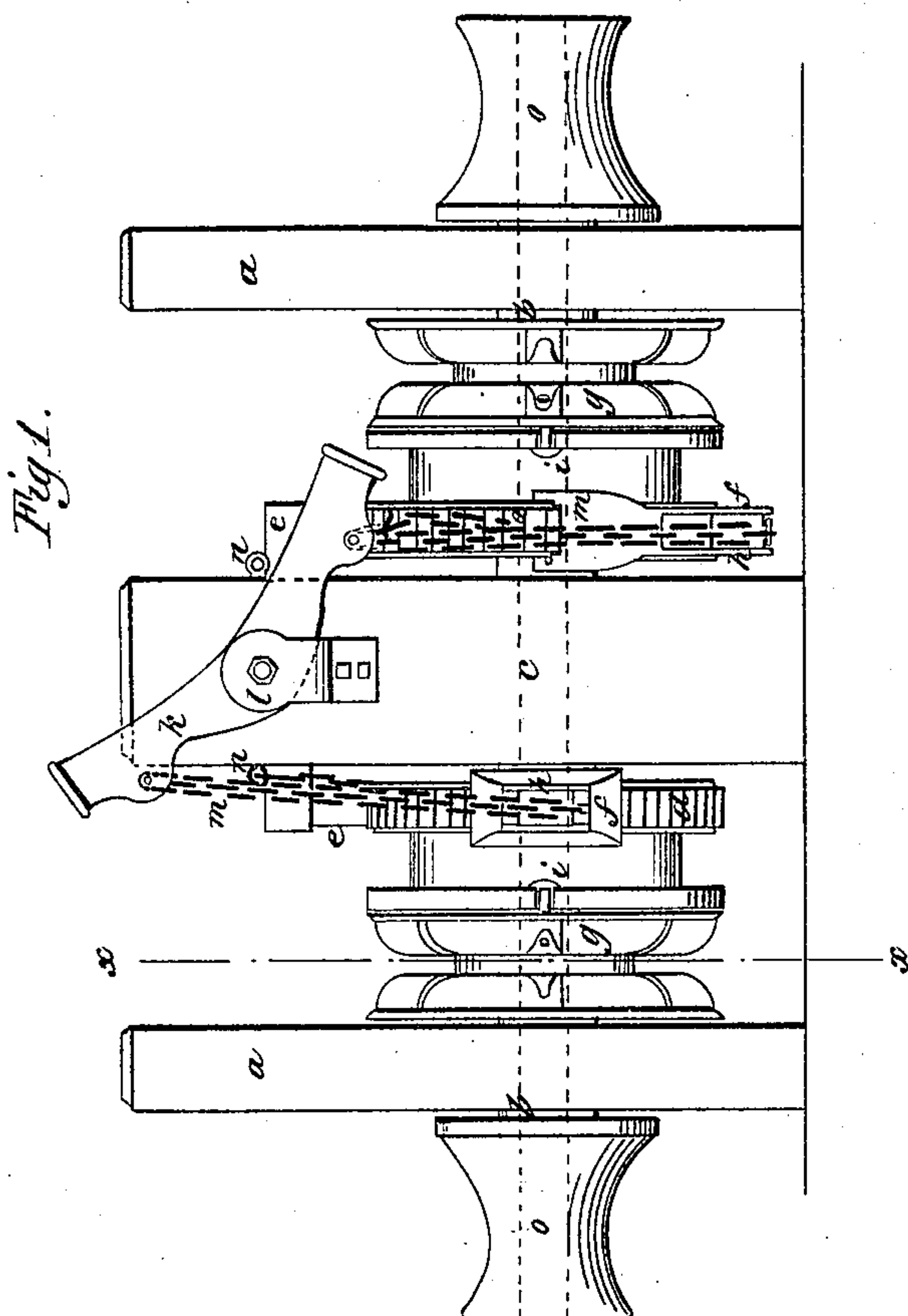


*P. H. Jackson,*  
*Windlass.*

*N<sup>o</sup> 41,222.*

*Patented Jan. 12, 1864.*



*Witnesses:*

*Thos. G. Ward*

*Chas. H. Smith*

*Inventor:*

*Peter H. Jackson*

# UNITED STATES PATENT OFFICE.

PETER H. JACKSON, OF NEW YORK, N. Y.

## IMPROVED WINDLASS.

Specification forming part of Letters Patent No. 41,222, dated January 12, 1864.

*To all whom it may concern:*

Be it known that I, PETER H. JACKSON, of the city and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Ships' Windlasses; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is an elevation of my windlass, and Fig. 2 is a cross-section of the same at the line *x x*.

Similar marks of reference indicate the same parts.

The nature of my said invention consists in the combination of a chain-wheel with a double chain-purchase connecting the walking-beam to the windlass pawl-lever, by which device the chain can be drawn in at a faster or slower speed, according to the weight of the anchor or the number of men actuating the walking-beam.

In the drawings, *a a* are the windlass bits sustaining the shaft *b* of the windlass. *c* is a center bit, termed the "samson-post," on each side of which are the ratchet-wheels *d*, firmly attached to the shaft *b*; and *e e* are the pawls to these ratchet-wheels, hanging from the samson-post *c*. *f f* are the pawl-levers of the windlass, grasping the ratchet-wheels *d*.

The parts thus far being of a well-known character require no further description.

*g g* are chain-wheels that are free to turn on the shaft *b*, but can be firmly connected to and rotated by keys or pins *i i*, that are placed through flanges adjoining the ratchet-wheels *d*, or any other device may be employed for connecting or disconnecting the chain-wheels *g* and ratchet-wheels *d*. At the ends of the pawl-levers *f* sheaves are introduced, as seen at *h*, and *k* is a walking-beam or brake on a fulcrum, *l*, upon the samson-post *c*, and

to this walking-beam handspikes or brake-levers are applied, as usual, to be operated by the sailors or attendants.

A chain, *m*, is attached at one end to the walking-beam *k*, and passes down under the roller *h*, and the other end of said chain can be hooked to the walking-beam contiguous to the other end of the chain, or to an eye, *n*, upon the samson-post. In Fig. 1, I have shown one of the chains with both ends attached to the walking-beam, and the other chain with one end hooked to the eye *n*. In the former case the pawl-lever *f* will be moved at its outer end the same distance as the walking-beam at the point where the chain is attached, while in the latter instance the power will be doubled, because the pawl-lever will only move half the distance of the walking-beam, the chain drawing off the moving pulley *h*. By this arrangement the chain cable passing around either or both chain-wheels *g g* can be drawn in faster or slower, according to the available power applied to the walking-beam or brakes.

The pawl-lever *f* may be fitted to clutch into grooves in the sides of the ratchet-wheel, or be formed as an eye surrounding the shaft *b*.

Winch-heads *o o* may be applied at the outer ends of the windlass-shafts.

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

The combination of the chain-wheels *g g*, ratchet-wheels *d d*, pawl-levers *f f*, walking-beam or brake *k*, and chain-connection *m*, forming a double or single purchase, as and for the purposes specified.

Dated December 3, A. D. 1863.

PETER H. JACKSON.

Witnesses:

CHAS. H. SMITH,  
THOS. GEO. HAROLD.