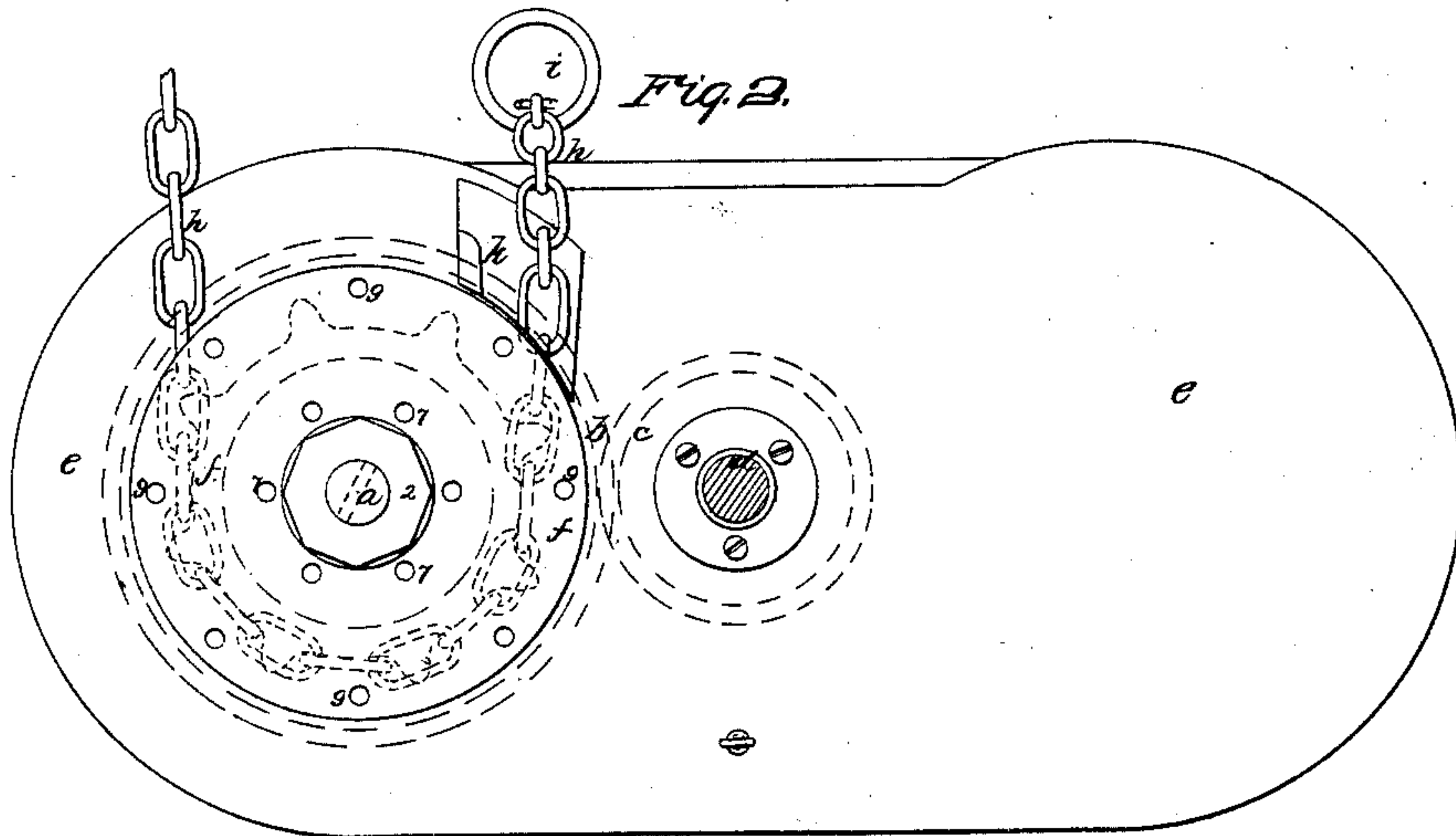
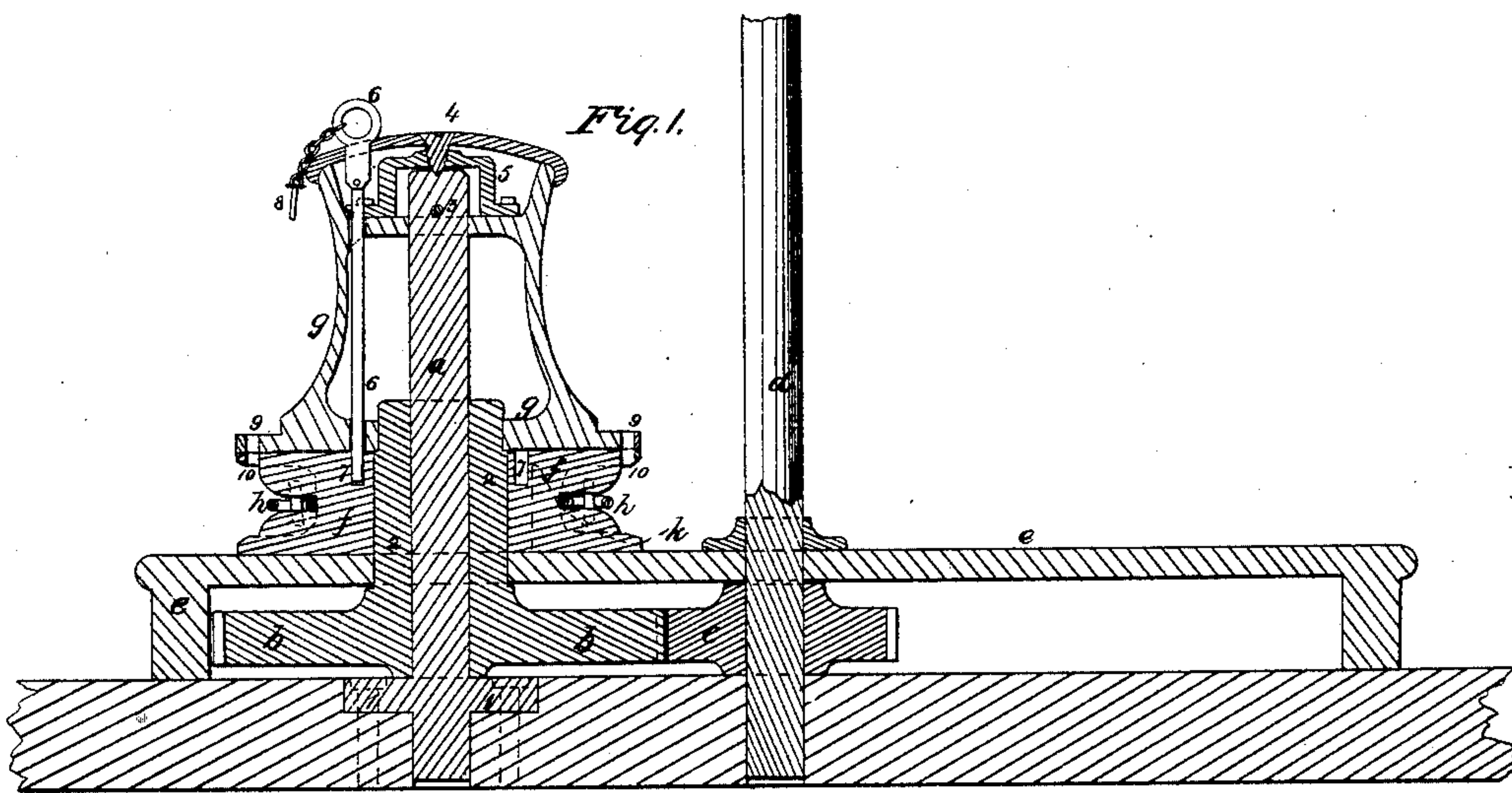


P. H. Jackson,

Windlass.

N^o 34,834.

Patented Apr. 1, 1862.



Witnesses:

Lemuel W. Serrell
Thos Geo. Harbeck

Inventor:

Peter H Jackson

UNITED STATES PATENT OFFICE.

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

IMPROVED VERTICAL WINDLASS.

Specification forming part of Letters Patent No. 34,834, dated April 1, 1862.

To all whom it may concern:

Be it known that I, PETER H. JACKSON, of the city and State of New York, have invented and made a certain new and useful Improvement in Vertical Windlasses; and I do hereby declare that the following is 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 a vertical section of my windlass, and Fig. 2 is a plan of the same with the barrel removed.

Similar marks of reference denote the same parts.

The nature of my said invention consists in the employment of a horizontal gear-wheel driven by a pinion and shaft connecting to a capstan or handspike-head, said gear-wheel being on a vertical fixed iron shaft or stud and carrying on the hub of said wheel a chain-drum and also a capstan-barrel, said capstan-barrel being permanently connected to said hub, while the intermediate chain-wheel can be connected by a pin or slide to the capstan-barrel and be moved thereby or allowed to revolve on said hub independent of either the said gear-wheel or capstan.

In the drawings, *a* is a stud or vertical shaft permanently secured to the deck by the plate or flange 1.

b is a gear-wheel setting on this stud and revolved by the pinion or wheel *c* on the vertical shaft *d*, that extends to a capstan or handspike-head of any usual character, which for convenience is generally to be placed upon the deck above.

e is a metallic box or case placed over the gears *b* and *c* for their protection.

The wheel *b* has a long hub 2, extending through the case *e*, and *f* is a chain-wheel placed on this hub and revolving upon the circular part thereof, as seen in Fig. 2. Above this chain-wheel the hub 2 is formed polygonal to receive the base of a capstan-barrel *g*, or said capstan-barrel might be keyed onto this hub 2, in either case the connection being rigid and permanent. The upper part of this capstan-barrel is guided and sustained by the stud *a* and revolves thereon, a pin 3 being employed to keep the parts from rising

on this stud; and a screw 4, through a yoke 5, may be employed to sustain the weight of the capstan-barrel on the end of said stud, to avoid friction. The capstan-barrel *g* itself is to be of any usual shape, and to connect the capstan itself with the chain-wheel *f*, I employ the pin 6, passing vertically through the capstan and taking holes 7 7 in the chain-wheel, and when the chain-wheel is to be disconnected the said pin or slide 6 is lifted and a cross-pin 8 introduced to sustain it.

I provide holes 9 9 around the base of the capstan and similar ones 10 10 in the upper flange of the chain-wheel. Through these a pin can be introduced if required in consequence of the slide or pin 6 becoming injured and rusty. The chain *h* passes out of the locker-pipe *i* around the chain-wheel *f*, thence through a hawser-pipe, as usual; and *k* is a block fixed on the case *e*, that by its inclined surface insures the delivery of the chain from the wheel *f* in cases where the downward pull of the chain in passing to the locker might cause the chain to bind in the wheel. By this construction and arrangement of devices the chain-wheel is free to revolve and allow the chain to run out when desired, and the power capstan-barrel *g* can be used at the same time without the chain wheel, or both may be acted on at one time, and the capstan does not require to be lifted for its disconnection, and the power acting upon it being transmitted through the wheel *b* and its hub does not have to be applied to the capstan-head itself.

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

The employment of the elongated hub 2 of the wheel *b* to receive the capstan-head *g*, in combination with the chain-barrel *f*, fitted to rotate on the said hub between the capstan and wheel and connected to or disconnected from said capstan, substantially as specified.

In witness whereof I have hereunto set my signature this 20th day of December, 1861.

PETER H. JACKSON.

Witnesses:

LEMUEL W. SERRELL,
THOS. GEO. HAROLD.