W. D. Grimshaw,

Capstan.

No. 51,174. Patented Nov. 28, 1865.

Fig. 1.

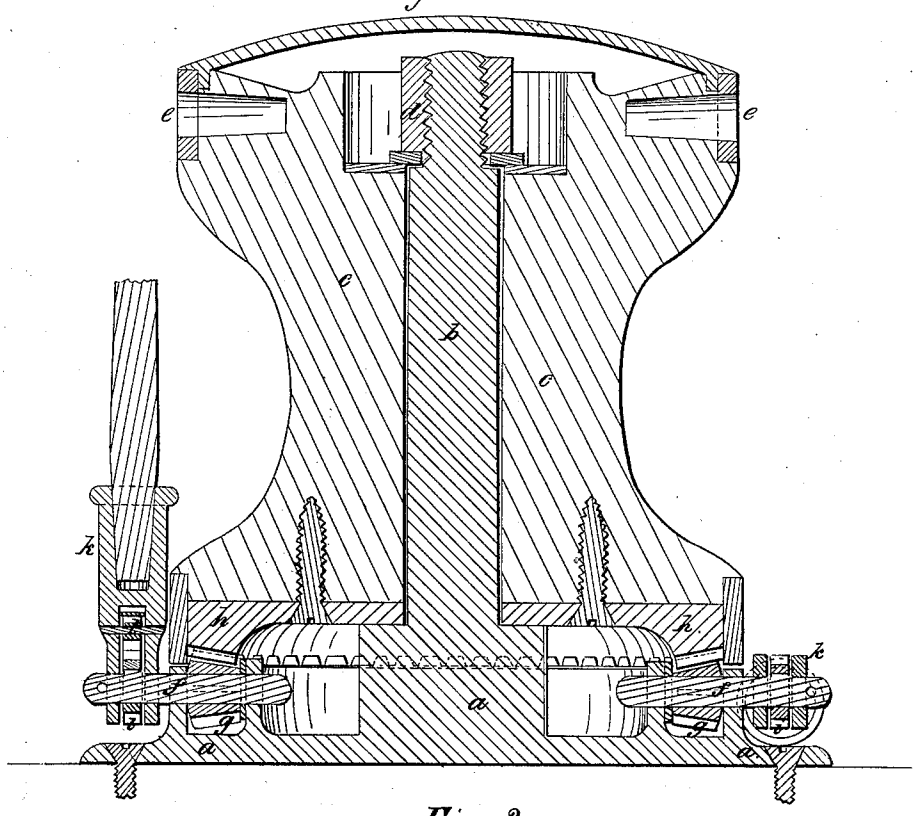
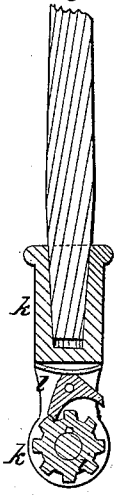


Fig. 2.



Witnesses:

Thos. Geo. Harvey

Chas. H. Smith.

Inventor:

William Dakin Grimshaw

UNITED STATES PATENT OFFICE.

WILLIAM DAKIN GRIMSHAW, OF NEW YORK, N. Y.

IMPROVED CAPSTAN.

Specification forming part of Letters Patent No. **51,174**, dated November 28, 1865.

To all whom it may concern:

Be it known that I, WILLIAM D. GRIMSHAW, of the city and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Capstans; 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 vertical section of the capstan through the actuating-shafts, and Fig. 2 is a section through one of the handspike-sockets.

Similar marks of reference denote the same parts.

In capstans heretofore manufactured it has been usual to have pawls on the capstan taking a circular ratchet or pawl-bed. My invention has for its object the dispensing with the pawl-bed and pawls and making use of the handspike-sockets as pawls when the capstan is rotated by handspikes set in the head of the capstan.

In the drawings, *a* is the base of the capstan carrying and supporting the shaft *b*, upon which is the capstan-barrel *c*, retained by the nut *d* on the end of *b*.

e are the sockets in the head of the capstan for receiving the handspikes when the capstan is to be moved by power applied directly to said capstan.

f f are short shafts supported in the base *a*, with a bearing or journal box on each side of the pinions *g g*, that gear to the wheel *h* on the under side of the capstan-barrel *c*.

i i are ratchet-wheels secured to the shafts *f f*, outside the bed *a*, and each ratchet-wheel is between the forks of the handspike-socket *k*, on the shafts *f*, respectively.

l is a double-acting spring-pawl having its fulcrum in the socket *k* and fitted to take the teeth of *i*, as seen in Fig. 2, so that the ratchet can be made to operate either way.

Both of the sockets *k* are fitted in the same manner, and it will be evident that when the handspike-sockets are thrown over upon the deck the pawls of the said sockets will act as ratchets to prevent the capstan running back while the said capstan is being worked by handspikes in the sockets *e*; and when it is desired to move the capstan with a slower speed and increased power the handspikes are to be inserted in the sockets *k*, and said sockets and handspikes worked simultaneously, the one moving the capstan as the ratchet on the other runs back over the teeth.

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

The sockets *k* and spring-pawls *l*, in combination with the gear-wheels *g* and *h* and capstan *c*, substantially as specified, whereby a separate pawl-bed and pawls are dispensed with, as set forth.

In witness whereof I have hereunto set my signature this 11th day of October, 1865.

WILLIAM DAKIN GRIMSHAW.

Witnesses:

GEO. D. WALKER,
CHAS. H. SMITH.