S. Holmes, 2d,

Windlass.

No. 5,527. Patented Apr. 25, 1848.

Fig. 3.

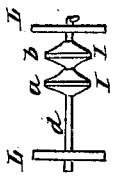


Fig. 1.

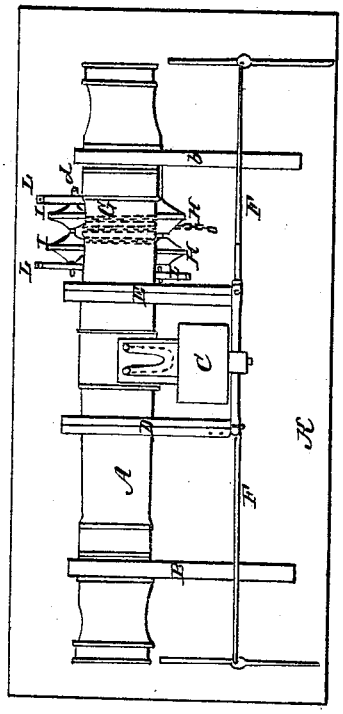
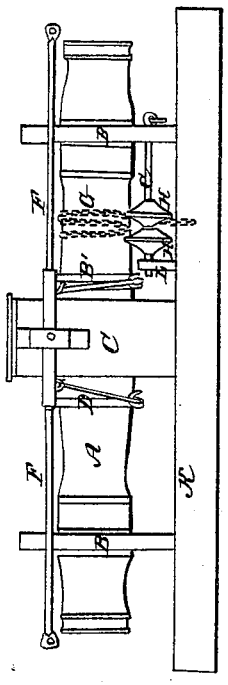


Fig. 2.



UNITED STATES PATENT OFFICE.

STEPHEN HOLMES, 2D, OF KINGSTON, MASSACHUSETTS.

SHIP'S WINDLASS.

Specification of Letters Patent No. 5,527, dated April 25, 1848.

To all whom it may concern:

Be it known that I, STEPHEN HOLMES, 2d, of Kingston, in the county of Plymouth and State of Massachusetts, have invented a new and useful Improvement in Ships' Windlasses or Capstans, which improvement is intended for the purpose of preventing the overriding or fleeting of the coils of the cable or chain wound upon the said windlasses; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of said drawings Figure 1, denotes a top view or plan of a windlass having my improvement applied to it. Fig. 2, is a front elevation.

In said drawings A, exhibits a common windlass, B, B, the bitts, C, the pawl post, D, E, the heaving pawl cases, F, the brakes, and G, the cable or chain from the anchor as coiled around the windlass after extending through the hawse hole. The difficulties and dangers attendant upon overriding or fleeting of the chain, or cable are well known to mariners. Many a valuable ship has been lost in consequence thereof.

My improvement consists in the employment of one or more guide wheels H, H, or I, I, in such manner, that each shall extend at its periphery between two contiguous coils of the chain, and rest in contact with or nearly in contact with the barrel of the windlass, as seen in the drawings. Each of said wheels may be composed of two flat cones or approximations to cones arranged with their bases in conjunction, and their apexes in opposition, as seen at *a*, *b* in Fig. 3. In the drawings two of said wheels, are represented as placed on each of the opposite sides of the windlass, and supported by and so as to freely revolve, on one of two rods, or round bars *c*, *d*, arranged in horizontal position somewhat above the deck K, and suitably sustained by standards L, L, or other proper equivalents. I do not limit my invention to the use of any particular number or disposition of said wheels, as these are matters which must be regulated by circumstances. I mean however that each wheel however it may be placed or disposed, shall enter between any two contiguing coils of the chain, and keep them apart from one another, and from overriding or "fleeting" as termed by seafaring men.

My improvement differs from the common application of a grooved barrel so applied to the windlass that the coils of the chain shall pass partially around it as well as around the windlass. In my invention the chain is coiled on the windlass alone. I therefore get rid of the friction produced by the strain on the said grooved barrel, and the working thereof. Besides I avoid the danger of breaking the shaft, journals, or supports of said grooved barrel. I am enabled to "pay out" or let out the chain or cable, in the act of dropping an anchor, with no possibility of overriding of the coils, and without the friction on the chain usually created by a grooved barrel.

What I claim as my invention is—

One or more rollers, or guide wheels, as combined with or applied to a windlass or capstan barrel and used substantially in the manner, and for the purpose as above specified.

In testimony whereof I have hereto set my signature this twelfth day of May A. D. 1827.

STEPHEN HOLMES, 2D.

Witnesses:

ALEXANDER HOLMES,

NATHAN SIMMONS.