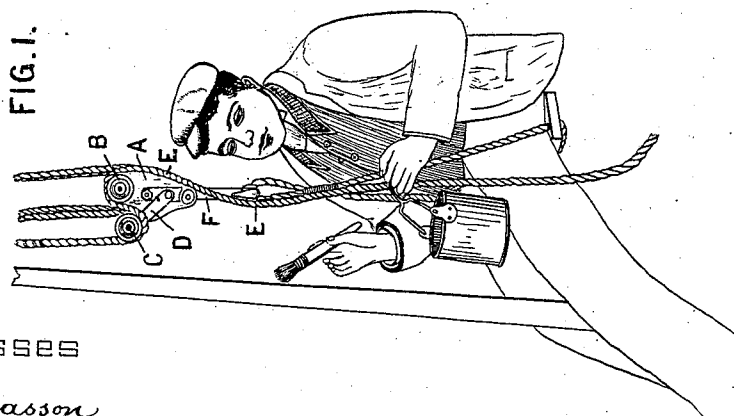
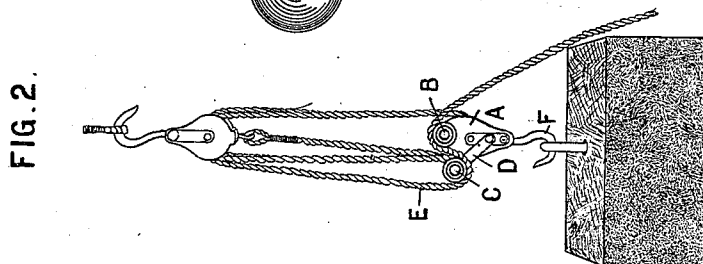
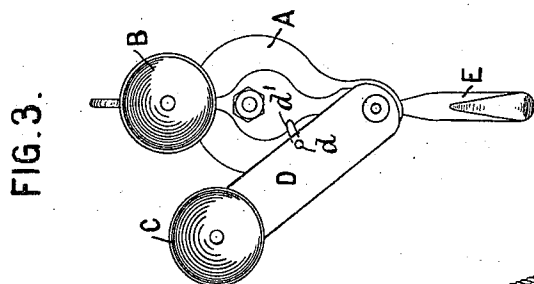
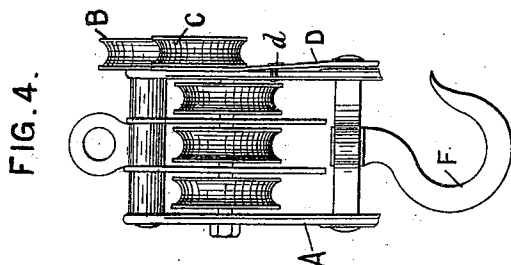


(No Model.)

T. RYLAND.
BLOCK AND TACKLE.

No. 549,279.

Patented Nov. 5, 1895.



Witnesses

E. E. Masson

A. B. Degees

Inventor

Thomas Ryland
by J. S. Sittman Atty.

UNITED STATES PATENT OFFICE.

THOMAS RYLAND, OF CHESTER, ENGLAND.

BLOCK AND TACKLE.

SPECIFICATION forming part of Letters Patent No. 549,279, dated November 5, 1895.

Application filed May 27, 1895. Serial No. 550,787. (No model.)

To all whom it may concern:

Be it known that I, THOMAS RYLAND, a subject of the Queen of Great Britain, residing at Chester, in the county of Chester, England, have invented certain new and useful Improvements in Block and Tackle, of which the following is a specification.

In the use of block and tackle by painters in painting the sides of ships, houses, and the like, also in the use of such tackle for raising heavy articles into lathes and the like and for other purposes where the lower block is always within reach, it is very desirable to have some method of holding fast the rope without having to look about and find some point to tie it to. Now this invention is designed to supply this want and to supply an attachment at small cost, not in the way, yet always ready when wanted.

The invention will be understood from the following description, reference being had to the accompanying drawings, in which—

Figure 1 is a general view of my improved tackle in actual use; Fig. 2, a side elevation; Fig. 3, a front elevation of the lower block with my attachment applied thereto, and Fig. 4 a side elevation.

My invention consists, as shown in the figures, of attaching to the side of the lower block A, near the upper part, an annular grooved projection B and securing a similar projection C on a link D, pivoted to the lower part of the block A and having a short radial motion, so that it can stand either almost touching the other projection B or the two projections B and C be sufficiently wide apart for the rope to be very easily entered between them. The pin *d* on the link, in conjunction with the slot *d'* in the block, limits the movement of the link.

The mode of action is as follows: Having used the blocks and the ropes being in tension, the hauling-rope E is held by the hand a little above the bottom block. The rope is now passed by the other hand round the circular grooved wheel C, attached to the lever D, and between that and the other wheel B

and round the latter, lying in the grooves of these two wheels. The end of the rope E now being momentarily held, while the other part is let go, the tension on the block caused by the weight hanging from the hook F causes the movable wheel C to jam the rope against the other wheel B, and the harder the pull the tighter the squeeze; consequently the rope is held. To relieve the tension, all that is required is to again pull upon the rope E above the lower block, when it can be at once released.

It will be obvious from this description that in place of a grooved wheel rigidly attached to the free end of a link an eccentric wheel or cam on a fixed pivot would act nearly as well, and the invention does not merely consist of the exact details already described, but also in the method of fixing the rope by attaching a movable gripping device to the lower block, so arranged that the grip shall be in proportion to the pull of the rope and caused by such pull.

I declare that what I claim is—

In block and tackle, the combination of an upper-block and a hoisting-rope, with a lower-block having a link pivoted to the lower part of one side thereof, said link provided at its upper end with an annular grooved outward projection, and at its inner side with a pin, the adjacent side of the block having a radial groove for retaining said pin, and above the pin an annular outward projection, as described, the slack of the rope being brought around the under side of the link-projection, thence upward and over the block-projection, so that the weight suspended from the block shall cause the rope to be automatically clamped between the two projections, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS RYLAND.

Witnesses:

G. C. DYMOND,
W. H. BEESTON.