J. C. NEWCOMB.

Attachment for Pulley-Blocks.

No. 221,697. Patented Nov. 18, 1879.

Fig. 1.

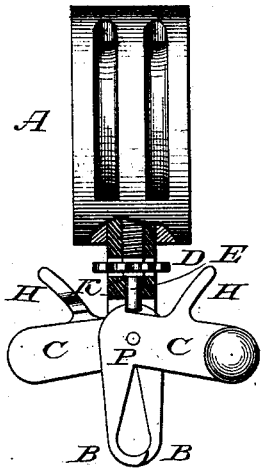



Fig. 2.

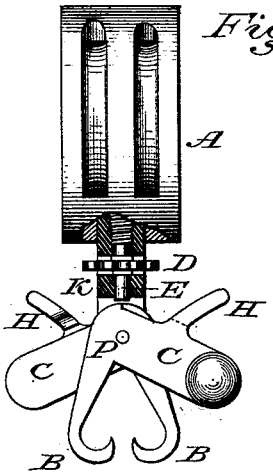



Fig. 3.

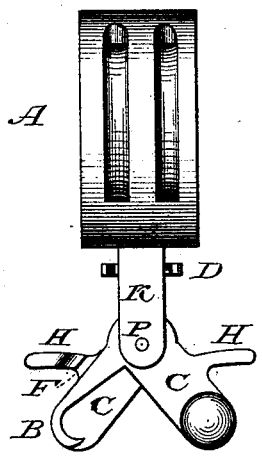



Fig. 4.

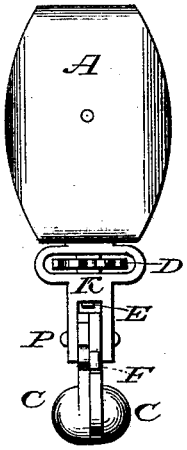
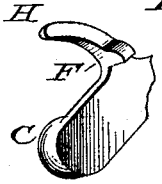



Fig. 5.

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# UNITED STATES PATENT OFFICE.

JACOB C. NEWCOMB, OF NORTH SCITUATE, MASSACHUSETTS.

## IMPROVEMENT IN ATTACHMENTS FOR PULLEY-BLOCKS.

Specification forming part of Letters Patent No. **221,697**, dated November 18, 1879; application filed March 26, 1879.

*To all whom it may concern:*

Be it known that I, JACOB C. NEWCOMB, of North Scituate, Plymouth county, Massachusetts, have invented a new and useful Attachment for Pulley-Blocks; and I do hereby declare that the following specification and the accompanying drawings give a correct description of the same.

My invention is particularly applicable to the tackle which is used for lowering a boat from a vessel's side; and my object is to detach the tackle from the boat automatically as soon as the latter rests on the water. The usual practice is to suspend the boat from ordinary hooks fixed in the lower blocks of the tackle, these hooks connecting with eyebolts in bow and stern. When the boat is lowered men stand ready to unhook the blocks the moment the boat reaches the water. This operation is, in darkness and rough weather, difficult and dangerous.

The essence of my invention consists in furnishing the lower pulley-blocks with a pair of "sister-hooks" so constructed that the moment the boat rests on the water sufficiently to relieve the strain on the tackle, the hooks detach themselves automatically from the boat, and are at the same time masked, so that they cannot accidentally catch the gunwale or other part of the boat.

A second part of my invention relates to a locking device for preventing the hooks from becoming unfastened accidentally.

Figure 1 is a front view of a pulley-block with the improved hooks attached, the two hooks being closed together as when connected with an eyebolt. Fig. 2 is a similar view with the hooks partly open, and Fig. 3 with the same entirely open. Fig. 4 is a side view of the apparatus. Fig. 5 is a partial perspective view to show the lug F, the use of which will be explained. Figs. 1 and 2 show a partial vertical section in order to explain the locking device.

The construction and operation are as follows: The hooks proper, B B, are of the ordinary kind called "sister-hooks," and are connected by a suitable stock, K, to the block A. When these hooks B B are attached to a weight and a strain applied, they act in the ordinary way so long as the strain continues; but each hook has a weighted arm, C C, projecting horizontally from the pivot P, on which it turns, and these two arms, if allowed to drop down ward, separate the hooks, as in Figs. 2 and 3. Now, if the hooks are brought together and a moderate strain applied to them, the arms will not fall; but if the strain is removed, the arms fall and the hooks are separated and detached from their connection. So for the purpose proposed, as long as the hooks sustain the weight of the boat, they hold securely; but the moment the weight is taken off (by the boat resting on the water) they are detached and the boat is free.

It will be noticed in Fig. 3 that when the hooks B B are wide open, they come opposite the arms C C and cannot catch anything accidentally. A small lug, F, Figs. 3, 4, and 5, serves to stop them in this position.

The projections H H serve as convenient handles for manipulating the apparatus in hooking on.

The locking device is constructed as follows: Within the stock K is a movable vertical spindle, E, threaded on its upper part, so as to be raised or lowered by rotation. A hand-wheel, D, on the spindle serves to turn the same, and the spindle is splined, so as to slip through the hand-wheel longitudinally.

The upper part of each hook above the pivot is formed into a tooth or catch, and the two teeth are so located that when the pair of hooks are drawn together, as in Fig. 1, the spindle E may be screwed down so that its lower end comes between the two catches, and thus locks the hooks. Then, when desired, the spindle E may be screwed up, as in Fig. 2, clear of the catches, and the hooks are thus free to open.

Instead of the threaded spindle E, a simple pin may be arranged to drop between the catches by its own weight or otherwise; or a common lashing (mousing) may be fastened around the handles H H.

I am aware that self-detaching weighted

hooks have been made before, (patents of G. H. Kempton, August 20, 1867, and W. Carter, February 16, 1869;) but they lack the masking and locking devices which I describe and claim.

I claim—

1. The combination of the pulley-block A, the stock K, the pair of hooks B B, the lug F, and the weighted arms C C, the whole arranged substantially as described, and for the purposes explained.

2. The combination of the pulley-block A, the stock K, pair of hooks B B, with catches at the top, as shown, the weighted arms C C, the spindle E, and the hand-wheel D, the whole arranged substantially as described, and for the purposes explained.

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