

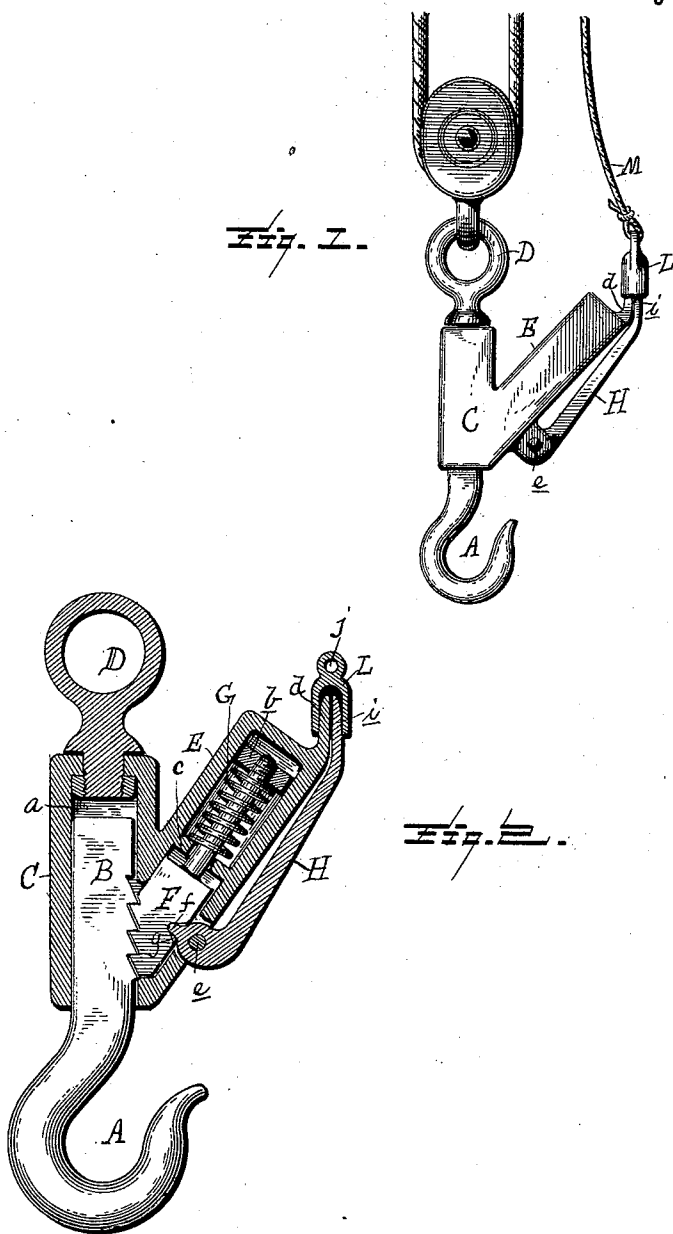
(No Model.)

G. L. ENGGREN.

DEVICE FOR SUSPENDING BOATS IN DAVITS ON VESSELS.

No. 431,741.

Patented July 8, 1890.



WITNESSES

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DEVICE FOR SUSPENDING BOATS IN DAVITS ON VESSELS.

SPECIFICATION forming part of Letters Patent No. 431,741, dated July 8, 1890.

Application filed November 7, 1889. Serial No. 329,512. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV L. ENGGREN, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Devices for Suspending Boats in Davits on Vessels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in devices for suspending boats in the davits on vessels.

It has for its object to provide a device of this character by which the boat is released the moment it is lowered in the water, so that it can be got away as quickly as possible in rough weather. I provide a catch to engage the hook from which the boat is suspended, said catch working on an incline and designed to hold the hook till the weight of the boat is removed therefrom by the boat coming in contact with the water and buoyed up thereby when the catch is automatically removed from the hook, allowing the boat to at once become free.

The novelty resides in the peculiar combinations, and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation showing my improvement as applied to the hoisting device of a ship, which may be from the davit, or may be other suitable hoisting and lowering device. Fig. 2 is an enlarged vertical section of the same.

Like letters of reference indicate like parts in both views.

Referring now to the details of the drawings by letter, A designates a hook from which the boat is designed to be suspended. It is formed with a toothed shank B, which is designed to work within the chamber *a* of the casting C. To the upper end of this casting is

connected a swivel-hook D or ring to which is designed to be attached the tackle for hoisting or lowering the boat, as shown in Fig. 1. 55

The casting C has an angular or inclined portion E, forming an inclined chamber, as shown best in Fig. 2, and within this inclined chamber works the catch F, toothed upon its vertical face, as shown in said Fig. 2, and having around its shank a coiled spring G, finding one point of resistance against the nut *b* upon the upper threaded end of said shank and at the other against the partition or diaphragm *c* through a hole in which the shank of the catch works freely. The upper under end of this inclined chamber has an upwardly-inclined projection or fin *d*, as shown best in Fig. 2. 60 65

H is a lever, pivoted at its lower end, as at *e*, in the side walls of an aperture in the inclined chamber of the casting, and has an inwardly-extending lip or projection *f*, which engages a notch *g* in the catch F, as shown in Fig. 2. The other or free end of the lever has a tongue or projection *i*, which, when the lever is closed, as shown in both figures, is designed to lie flat against the fin *d* of the inclined chamber. 70 75

The device is designed to operate as follows: In both of the figures of the drawings the parts are in the position which they would assume as the boat is being lowered, the lever being closed and the tackle attached to the swivel-ring D. The weight of the boat tends to keep the teeth of the hook and of the catch in the position shown in opposition to the force of the spring. The greater the weight the greater the tendency to pull the hook and catch downward on such an angle as to more firmly lock them. As the boat strikes the water and the weight is removed from the hook the spring will force the catch back out of engagement with the hook and the hook will become detached from the casting, thereby allowing the boat to be got away at once. The casting remains on the swivel-hook ready for future use. The lever H serves to aid in forcing the catch into engagement with the teeth of the hook B. The spring G serves to withdraw the catch from engagement with the bolt when the weight is removed from the bolt. 80 85 90 95 100

In order to prevent the boat from becoming

ing detached while suspended, should it be struck by a wave, I provide a cap L, designed to be fitted over the fin *d* of the inclined chamber and over the free end of the lever, as shown in both figures of the drawings, the said cap being provided with an eye *j*, to which a small cord, as M, may be attached and connected to the davit, so that before the boat touches the water the cap will be removed and allow the free end of the lever to drop.

What I claim as new is—

1. A device for the purpose described, consisting of a hook, a casting to receive the shank thereof, and an inclined catch adapted to engage the shank of the hook and be retained in engagement therewith by the weight on the hook, substantially as and for the purpose specified.

2. The combination, with the casting and the hook having a toothed shank, of the inclined catch having teeth to engage the teeth of the hook and designed to be held in engagement therewith by the weight on the hook and to be released therefrom as the weight is removed from the hook, substantially as described.

3. The combination, with the casting having inclined chamber, of the hook working in

said casting, the catch working in the inclined chamber, the spring for retracting the catch, and the lever engaging the catch, all substantially as and for the purpose specified.

4. The combination, with a casting formed with inclined chamber, of the hook having toothed shank, the catch in the inclined chamber and provided with teeth to engage the teeth of the hook, the spring for retracting the catch, the lever engaging said catch, and the detachable cap over the free end of the lever and over the upper end of a portion of the chamber, substantially as and for the purpose specified.

5. The combination, with the casting having inclined chamber formed with projecting fin, of the hook, the catch, the spring, the lever engaging the catch and having a tongue at its free end, and the cap designed to fit over said tongue and fin, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GUSTAV L. ENGGREN.

Witnesses:

C. A. ENGGREN,
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