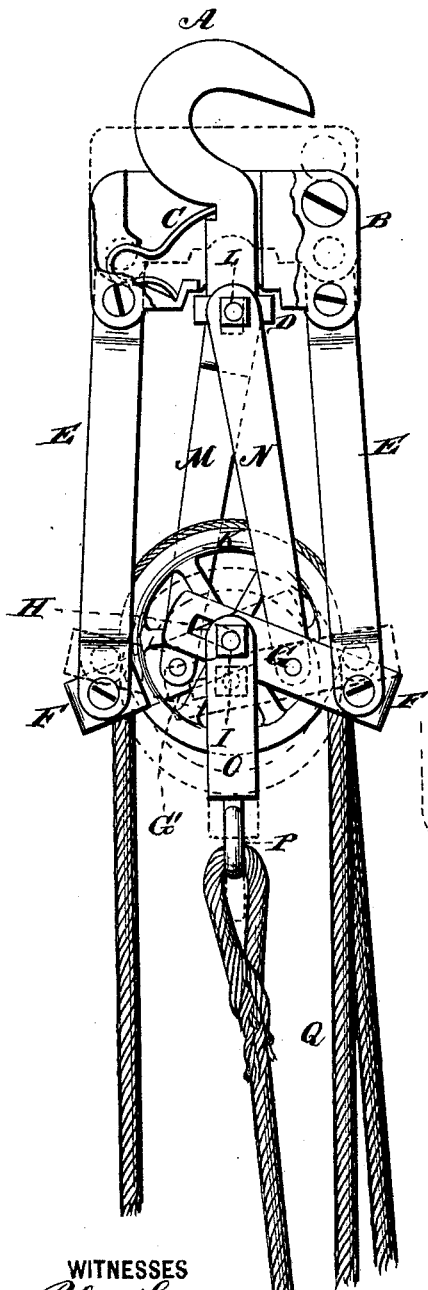


O. E. HUSS.
Shroud-Block.

No. 220,621.

Patented Oct. 14, 1879.

Fig. 1.



WITNESSES
Robert Everett
Chas G. Page

Fig. 2.

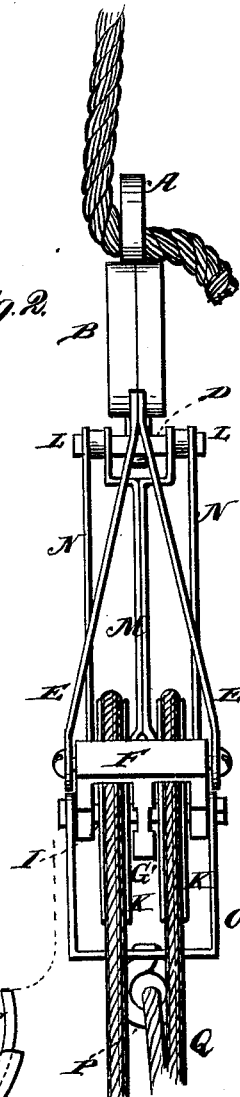
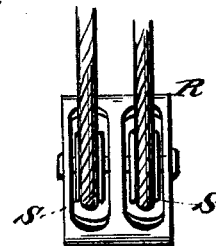
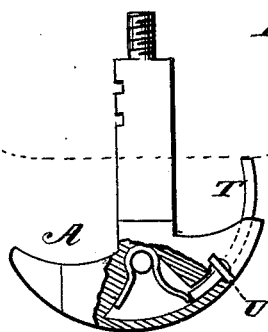


Fig. 3.



INVENTOR
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UNITED STATES PATENT OFFICE.

OSCAR E. HUSS, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO DAY O. CRANE, OF SAME PLACE.

IMPROVEMENT IN SHROUD-BLOCKS.

Specification forming part of Letters Patent No. **220,621**, dated October 14, 1879; application filed September 6, 1879.

To all whom it may concern:

Be it known that I, OSCAR E. HUSS, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Shroud-Blocks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan of my shroud-block. Fig. 2 is a sectional detail view, and Fig. 3 is a side-elevation view.

The nature of this invention consists in an improved shroud-block adapted to be employed in shrouding the masts of vessels, and also in numerous other instances where ropes are to be drawn taut, as will be fully described in the following specification, and particularly pointed out in the claims.

In the drawings, A designates a hook having its shank arranged to slide within a two-part casing, B. This casing is formed so that the hook may be partially retracted therein, and it is provided with a spring, C, which forces the hook out until checked by a nut, D, which is fitted upon the shank and adapted to strike against the casing.

The shank end of the hook is screwed into the nut D, so that the hook may be adjusted and extended out more or less from the casing, according to the diameter of the ropes which are to be gripped between the casing and the hook.

E E designate two pairs of metal straps or bars, which are pivoted at their upper ends in the casing B; and F F, two blocks or frames, which are pivoted between the lower expanded ends of the straps.

One of the blocks F is formed with extended sides G, while the remaining block is formed with short sides and an extended bar, G', intermediate of the same, the said bar G' and the side bars, G, being made with slots H, which constitute the bearings for an axle-rod, I, upon which the pulley-wheels K are loosely mounted.

Secured to the nut-piece D, in which the

shank of the hook A is fitted, as hereinbefore described, are two laterally-projecting pivots, L, and upon these are pivoted four metal straps or rods, M M and N N. The inner pair of straps, M, are expanded at their pivotal ends, so as to embrace the nut D, and are separated from the outer straps, N, by means of suitable washers.

Upon the outer ends of the pivots are suitable nuts or heads for maintaining the straps thereon.

The straps M are also pivoted to the bar or arm G' of one of the blocks F, while the straps N are pivoted to the sides or arms G of the remaining block or frame. As herein shown, the pivotal points of these straps upon the blocks are arranged between the slots and the pivots of the straps E E, and hence will be between the bearings of the axle upon which the pulley-wheels are mounted and the pivots by which the blocks and straps E are connected.

O designates a clevis, which is secured upon the ends of the axle I; and P, a ring or staple, to which the rope Q is secured.

In order to effectively apply the power requisite to operate the above mechanism, I provide a block and tackle, which may consist of the pulley-block R, pulley-wheels S, and rope Q, the block R being, in use, connected with a hook or staple or other device in convenient position.

The operation is as follows: The hook A is caught upon the rope or shroud which is to be tightened, and the pulley-rope tightened up until the tension thereof upon the pulley-wheels and clevis causes the blocks F to turn upon their pivotal bearings, and draws the axle of the said wheels toward the ends of the slots which are formed in the arms G C'. In this way these arms constitute levers which cause the hook to be partially retracted within the casing B, so as to firmly gripe the rope or shroud, and as the pulley-rope is still further tightened the rotation of the blocks F upon the pivots of the straps M and N will force the casing B with great power upon the shroud through the medium of the straps E E, whereby all danger of slipping as the shroud is being tightened will be obviated.

In some instances I propose forming the

hook with a curved spring-bolt, T, so that when a rope is gripped between the hook and casing the bolt may be projected, so as to guard against any lateral displacement of the rope from between the two. When desired, the bolt may be retracted within the casing and secured by a suitably-arranged catch, U.

The hook may also be made single or double, as shown.

The above apparatus may be employed for numerous purposes, among which may be mentioned the letting down boats from the davits of a ship, tightening the shrouds of a vessel, and in drawing taut any ropes whatsoever. The casing B may be continued down, so as to take the place of the straps E, the same result being attained.

What I claim is—

1. The hook A, adjustably fitted in the nut D, in combination with the casing B, pivoted pulley-blocks F, and metal straps connecting the said blocks with the hook and casing, substantially as shown and set forth.

2. The combination of the hook A, casing B, and spring with the blocks F F and the straps E M N, pivoted at both ends, as set forth.

3. The blocks F F, formed with the arms G G', having the slots H, in combination with the hook A, casing B, the straps E, pivoted to

the blocks and the casing, and the straps M N, pivoted to the arms of the blocks and connected with the hook, substantially as set forth.

4. The pivoted blocks F F, having slotted arms arranged to constitute bearings for the axle upon which the pulley-wheels K are mounted, in combination with the hook, casing, connecting-straps, and the clevis O, with block and tackle connected therewith, substantially as set forth.

5. The pivoted blocks F F, formed with the arms G and G', in combination with the axle I, having its bearings within slots formed in the arms of the blocks, the loosely-mounted pulley-wheels K, the straps E E, pivoted to the casing B and the blocks, and the straps M N, connected by pivots with the nut D, and pivoted to the arms of the blocks at points intermediate of the axle of the pulley-wheels and pivotal points of the straps E upon the blocks, substantially as shown and set forth.

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

OSCAR E. HUSS.

Witnesses:

JAMES J. SHEEHY,
ROBERT EVERETT.