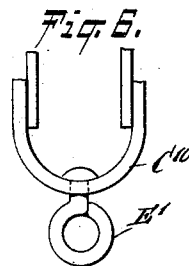
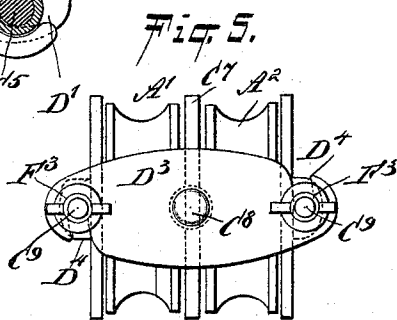
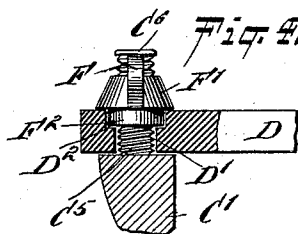
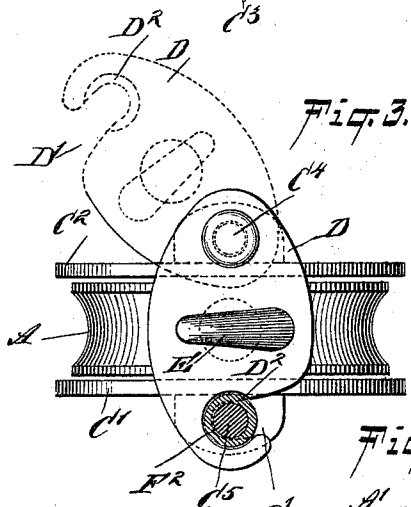
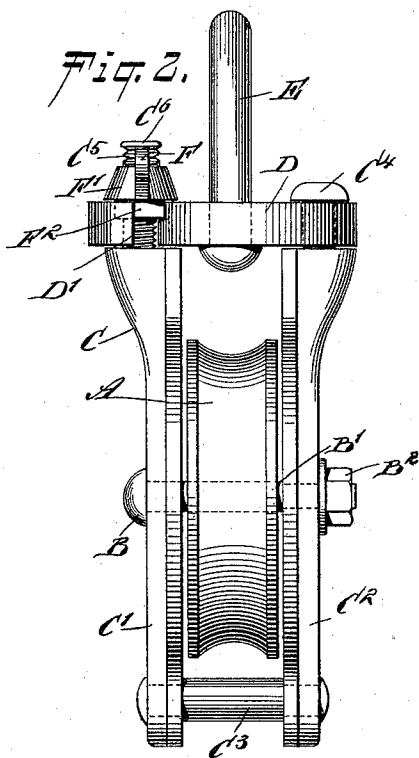
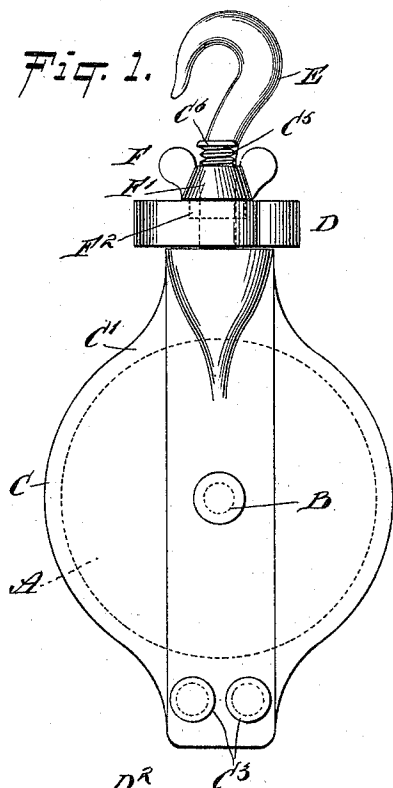


(No Model.)

T. DODS.
SNAP BLOCK.

No. 585,514.

Patented June 29, 1897.



WITNESSES:

William P. Goebel.
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UNITED STATES PATENT OFFICE.

THOMAS DODS, OF GUTTENBERG, NEW JERSEY.

SNAP-BLOCK.

SPECIFICATION forming part of Letters Patent No. 585,514, dated June 29, 1897.

Application filed March 26, 1897. Serial No. 629,395. (No model.)

To all whom it may concern:

Be it known that I, THOMAS DODS, of Guttenberg, in the county of Hudson and State of New Jersey, have invented a new and Improved Snap-Block, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved snap-block, arranged for convenient opening and closing, to connect or disconnect a rope or cable without requiring reeving of the cable or rope and without danger of losing any of the parts or weakening the block in any of its essential features.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is an end view of the same. Fig. 3 is a plan view of the same. Fig. 4 is a cross-section of part of the improvement, showing the lock for the cross-piece. Fig. 5 is a plan view of the improvement as arranged for a double-pulley block, and Fig. 6 is an end elevation of a modified form of the frame.

The sheave or pulley A is mounted to turn on the bolt B, secured in the sides C' and C² of the frame C, the said sides being connected with each other at their lower ends by stay-rods C³, and are adapted to be connected with each other at the top by a cross-piece D, adapted to swing sidewise, so that the frame may be opened and closed on placing the rope or cable in position on the pulley or sheave A. It will be seen that the frame sides C C' have end surfaces in a transverse plane, which at the same time is the plane of separation between the frame and the swinging cross-piece D. The cross-piece swings sidewise in a plane parallel to the plane of separation—that is, the pivot C⁴ is perpendicular to the plane of separation, said plane being arranged at an angle to the pulley's plane of rotation. As shown, the pivot C⁴ is arranged at an angle to the axis or bolt B and intersects the same. The cross-piece is for this purpose swung at one end on a pivot C⁴, formed or secured on the upper end of the side C², and at

the middle of the said cross-piece is attached the usual hook or eye E, as plainly shown in the drawings. The free end of the cross-piece D is provided in one side with a recess D', affording entrance for the screw-rod C⁵, projecting upwardly from the upper end of the side C', and on this screw-rod screws a nut F, preferably in the shape of a wing-nut, having a head F', adapted to engage the top of the cross-piece D, and having an offset F² extending downwardly from the under side of the head to fit into a counterbore D², formed in the top of the cross-piece and concentric with the inner end of the entrance or recess D'. (See Fig. 4.) The upper end of the screw-rod C⁵ is preferably formed with a head C⁶ to limit the upward movement of the nut F on the screw-rod C⁵, the rod being of such length that when the nut F is screwed upward to abut against the said head, the under side or bottom of the offset F² is above the top surface of the cross-piece D to permit of swinging the latter sidewise to engage or disengage the rod C⁵ and close or open the frame, for the purpose above described.

When the cross-piece D is swung into a closed position, as illustrated in the drawings, the operator in order to lock the said cross-piece in place screws the nut F downward to engage the offset F² with the counterbore D², so that the cross-piece cannot be swung sidewise and is securely locked to the frame. When it is desired to open the frame, the nut is screwed upward, as previously explained, to disengage the offset F² from the counterbore D². The cross-piece D can now be swung into an open position, as shown in dotted lines in Fig. 3.

Now it will be seen that by the arrangement described none of the parts can be lost when opening or closing the frame and the cross-piece is securely and safely locked in position by the nut, so there is no danger of an accidental slipping of the frame when the block is in use.

By reference to Fig. 4 it will be seen that when the nut F is screwed down, the offset F² as well as the under side of the head F' of the nut engage the cross-piece D, so as to hold the latter securely in position by the double bearing of the nut on the cross-piece.

The bolt B is formed with a shoulder B'

abutting on the inner face of the side C^2 , so that when the nut B^2 is drawn up on the extreme outer end of the bolt then the said bolt forms an additional stay to prevent the pivot C^4 and screw-rod C^5 from being drawn out of alinement when the block is subjected to a heavy strain. By this arrangement the cross-piece D will always readily open and close, as above described.

As shown in Fig. 5, two pulleys or sheaves $A' A^2$ are journaled in the frame C^7 , and in this case the cross-piece D^3 is pivoted at its middle at C^8 on the middle plate of the frame, and the free ends of the said cross-piece D^3 are formed with recesses D^4 for engaging the screw-rods C^9 , held on the sides of the frame C^7 . Nuts F^3 screw on the screw-rods C^9 in the same manner as the nut F on the screw-rod C^5 for locking the cross-piece D^3 in place at its two ends. It is evident that the frame C or C^7 may be constructed in various shapes, and instead of stay-bolts C^3 , as shown in Fig. 2, I may employ a yoke C^{10} , carrying the eye E^7 .

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A pulley - block, comprising an open frame, a cross-piece adapted to close the opening of the frame, the plane of separation between the frame and the cross-piece being at an angle to the pulley's frame of rotation, and

the cross-piece being mounted to move side-wise in a plane parallel to said plane of separation, and means for locking the cross-piece.

2. A pulley - block, comprising an open frame, a cross-piece adapted to swing across the opening of the frame about an axis intersecting that of the pulley, and means for locking the cross-piece, substantially as described.

3. A snap-block comprising a frame having a pivot and a screw-rod, a cross-piece hung on the said pivot and formed at its free end with a recess for engaging the said screw-rod, and a nut screwing on the said screw-rod and having an offset fitting into a counterbore formed in the top of the cross-piece at the inner end of said recess, substantially as shown and described.

4. A snap-block comprising a frame having a pivot and a screw-rod, a cross-piece hung on the said pivot and formed at its free end with a recess for engaging the said screw-rod, a nut screwing on the said screw-rod and having an offset fitting into a counterbore formed in the top of the cross-piece at the inner end of said recess, and means for limiting the movement of the nut on the said screw-rod, substantially as shown and described.

THOMAS DODS.

Witnesses:

CHARLES LURCOTT,
HERMAN WALKER.