

(No Model.)

T. R. FERRALL.
SNATCH BLOCK.

No. 516,192.

Patented Mar. 13, 1894.

Fig. 1.

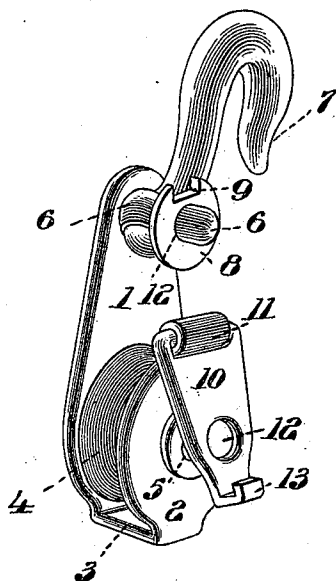


Fig. 2.

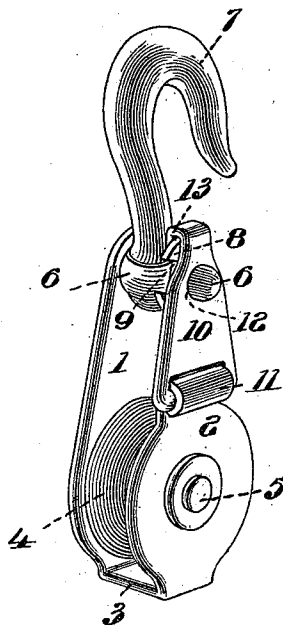


Fig. 3.

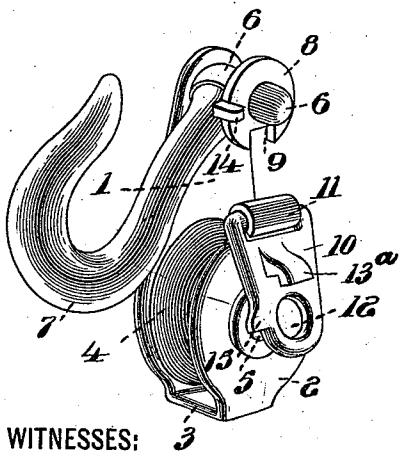
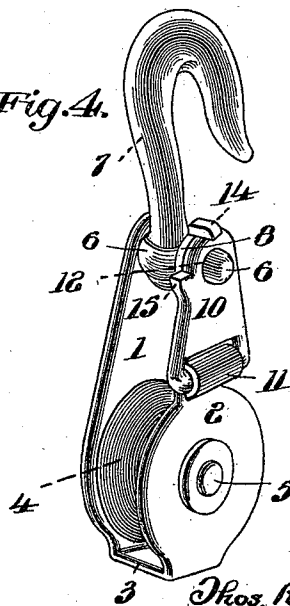


Fig. 4.



WITNESSES:

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SNATCH-BLOCK.

SPECIFICATION forming part of Letters Patent No. 516,192, dated March 13, 1894.

Application filed April 11, 1893. Serial No. 469,929. (No model.)

To all whom it may concern:

Be it known that I, THOMAS R. FERRALL, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Snatch-Blocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in snatch blocks, and has for its object to provide a hasp which shall afford a complete circumferential support to the trunnion pin which carries the hook, and at the same time preserve the feature of locking or unlocking said hasp by the rotation of such pin, and also to render the engagement of the locking elements ready and efficient.

In the accompanying drawings—Figures 1 and 2, are perspectives showing my improved snatch block open and locked respectively. Figs. 3 and 4, are also perspectives, similar to Figs. 1 and 2, but showing the locking lip at the bottom of the hasp instead of at the top thereof.

Similar numbers of reference denote like parts in the several figures of the drawings.

I have shown the cheek pieces, which constitute the housing, integral, but such construction has no particular connection with my present invention, and therefore the housing may be composed of the usual metal strapped wooden cheek pieces, if desired, and accordingly I do not wish to be limited to any construction of housing, since this improvement has reference solely to the devices which are operated to open and close the block.

1, 2, are the cheek-pieces, the former of which is longer than the latter, said pieces being connected at the bottom by an integral cross-strip 3, the whole forming the housing for the pulley sheave 4 which is journaled between said cheeks, in the usual manner, by the axial pin 5. Secured to the part 1 at the top thereof, and in such manner as to extend inwardly at right angles therefrom and be capable of revolution, is the trunnion pin 6

to which the usual hook 7 is swiveled. Rigid on said trunnion pin near its free end is the locking disk 8 notched at 9 in its periphery.

10 is the hasp hinged at 11 to the shorter part 2, and 12 is a perforation through said hasp adapted to register with the free end of the trunnion pin when such hasp is thrown up into locking position.

13 is a lip which extends from the outer end of the hasp and is adapted to enter the notch in the disk and depend in a plane in the rear of the latter when it is turned to a position preparatory to locking, as will be clearly understood by reference to Figs. 1 and 2.

Referring to Figs. 3 and 4, it will be seen that a lip 13^a projects from the lower part of the hasp, and that the location of the notch in the disk is changed accordingly, but it will be evident that this is a mere colorable variation and does not alter any principle or combination of parts in my improvement.

The operation of my improved snatch-block will be readily understood. Supposing the block to be open, the hook is thrown to one side to bring the notch into such position that the lip will, when the hasp is closed and the trunnion enters the perforation 12, pass through said notch, and the hook is then thrown back to normal position, thereby causing the disk to be interposed in front of the lip, thus locking the hasp. In opening the block, the hook is thrown aside to bring the notch into alignment with the lip, and the hasp is then free to be swung clear of the trunnion. In order to insure the turning of the disk to a predetermined position to facilitate the registration of the notch and lip, I provide shoulders 14, 15, on such disk and hasp, which shoulders abut together when the disk has been turned to the extent necessary to bring the notch to the point where the lip may enter the same, which will be readily understood by reference to Figs. 3 and 4.

It will be seen that the trunnion pin which carries the hook, is, when the parts are locked in position for use, supported and confined circumferentially at both ends, and this construction greatly relieves the pin of undue strain, and affords perfect bearing for the

trunnion so that the latter is free to turn in either direction. But of course, my locking devices may be used in the instance of a hasp which does not afford a journal to the trunnion pin, but which is a loop or shackle such as is commonly used, and I therefore do not wish to be circumscribed by any manner in which the hasp is adapted to the pin.

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

1. In a snatch block the combination of the hook, the trunnion pin carrying the hook, the frame having a pivoted hasp perforated to receive the trunnion and a disk rigidly secured on the pin inside the pivoted hasp, and

said disk having a notch adapted to be engaged by a lip on the hasp.

2. In a snatch-block, the combination of the trunnion pin swiveled in the end of one cheek-piece and having near its free end a notched disk, and a hasp hinged to the opposite cheek-piece and having a perforation for receiving said pin and a lip adapted to serve as a locking device inside of the notched disk, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS R. FERRALL.

Witnesses:

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A. J. TANNER.