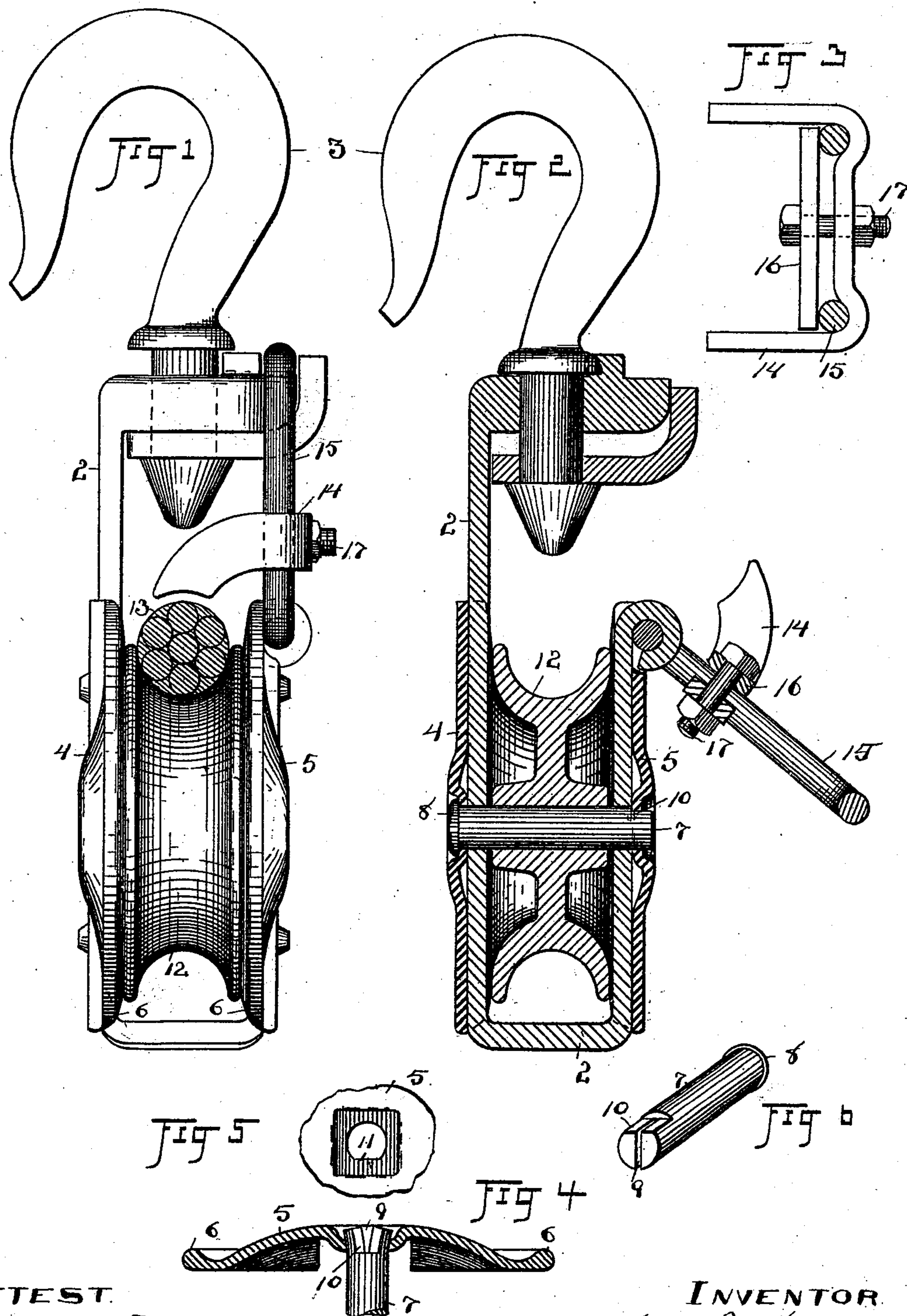


(No Model.)

H. V. HARTZ.
SNATCH BLOCK.

No. 516,268.

Patented Mar. 13, 1894.



ATTEST.
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G. Schaeffer

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UNITED STATES PATENT OFFICE.

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SNATCH-BLOCK.

SPECIFICATION forming part of Letters Patent No. 516,268, dated March 13, 1894.

Application filed January 13, 1893. Serial No. 458,269. (No model.)

To all whom it may concern:

Be it known that I, HENRY V. HARTZ, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Tackle or Snatch Blocks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to tackle and snatch blocks, and the invention consists in the construction and combination of parts substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is an edge elevation of my improved block, with the parts in position as in use. Fig. 2 is a vertical central sectional elevation, with the link swung out and the rope shown in cross section in Fig. 1 removed. Fig. 3 is a plan view of the rope or cable guard, and a cross section of the link to which it is attached. Fig. 4 is a cross section of one of the cheek pieces at about the center or middle thereof, and showing the edge of the cheek piece curved outward and upset to deepen and strengthen the immediate edge thereof. Fig. 5 is a face view of a central section of one of the cheek pieces, and disclosing especially the shape of the hole for the axle of the sheave. Fig. 6 is a detail in perspective of the sheave axle or spindle.

The strap 2 of the block is preferably made in a single piece bent into the shape seen in Fig. 1, and supporting the hook 3 at its upper end. With the straps so formed are used the two cheek pieces 4 and 5, secured by rivets or other suitable means directly to said straps. These cheek pieces are formed all around with the outwardly curved and deepened or upset edge 6, except above and below where the depressions are made in the said pieces to accommodate the strap 2, the exact construction of the said cheek pieces all around except at the straps being clearly disclosed in Fig. 4. This makes a very firm and serviceable construction, and is found altogether better than to curve the said side edges inward as was originally my practice. The axle or spindle 7 is adapted to pass through the

straps and the cheek pieces, and is purposely so constructed that it is practically permanently fastened in the block, and yet in such way that it can be removed. Thus, referring to Fig. 6, it will be seen that the said spindle has a slightly upset head 8, a split or slotted end 9, and a flat portion 10 on said split end.

Referring to Fig. 5, it will be seen that the cheek piece 4 has a hole with a straight portion 11 adapted to the flat portion 10 of the spindle. Now when the spindle is driven into position with the sheave 12 in place thereon, the head of the spindle is buried in the recess in the cheek piece, as seen in Fig. 2, while the point of the spindle occupies a similar relation in cheek piece 4. When driven in and arranged as shown, it only becomes necessary to spread the end 9 by driving a suitable tool into the slot in said end so as to spread the pin and make it engage the cheek piece very much as does the head 8. The spindle is firmly and permanently secured both against turning and against accidental or other removal, except when removal is necessary and then only by the necessary tools. Indeed, the spindle would be held securely without the head 8 by reason of the shoulder back of the flat surface 10 and the spreading of the end of the pin, as seen in Fig. 4.

A further improvement consists in the means shown for holding the rope or cable 13, upon the sheave. This consists in a substantially yoke shaped guard 14, shown in plan in Fig. 3, and detachably and adjustably secured to the link 15. This yoke or guard is made to engage at its corners upon the said link, and the said corners are curved to correspond to the rounded surface of the link, so that the engagement may be made very closely, and a cross piece 16 bears against the inside of said link and is held in position by a bolt 17, which passes centrally through said cross bar and the yoke and serves to clamp and hold the yoke in any adjusted position upon the link. It will be understood that there is a tendency in the rope or cable to work off of the sheave, and to overcome this tendency and to keep the rope in working position, a guard of this character has been found necessary. The adjustment of the guard adapts it to ropes or cables of different dimensions. The said guard is used more especially on the snatch

block, not generally being needed on tackle blocks, though it may in certain emergencies be placed on the latter class of blocks.

Having thus described my invention, what I claim is—

1. In a snatch or tackle block, an adjustable guard or holder to keep the rope on the sheave, whereby the guard is adapted to ropes of different thicknesses, substantially as set forth.
2. In a snatch or tackle block, a suspensory link connected with the strap, and an adjustable guard for the rope secured to said link, substantially as set forth.
3. The snatch or tackle block herein described having a link at one side and a substantially yoke-shaped rope guard adjustably fixed upon said link, substantially as set forth.
4. The snatch or tackle block, comprising a strap-piece bent between its ends to form the two side straps, the cheek-pieces fixed to said

straps, one of the said cheek-pieces having a perforated cavity to receive the head of the spindle, and the other having a perforated cavity with a straight portion in the hole, a sheave, and a cylindrical spindle for said sheave whose head is fitted in one of the cheek-pieces and whose point is provided with a flat portion to engage the straight portion of the hole in the other cheek-piece and is also split longitudinally and adapted to be spread apart in the cavity in said last named cheek-piece to secure it, the said spindle, in the block and against rotation therein, substantially as described.

Witness my hand to the foregoing specification this 5th day of January, 1893.

HENRY V. HARTZ.

Witnesses:

H. T. FISHER,

GEORGIA SCHAEFFER.