

J. F. Harcourt,

Tackle Block.

NO. 106,933.

Patented Aug. 30, 1890

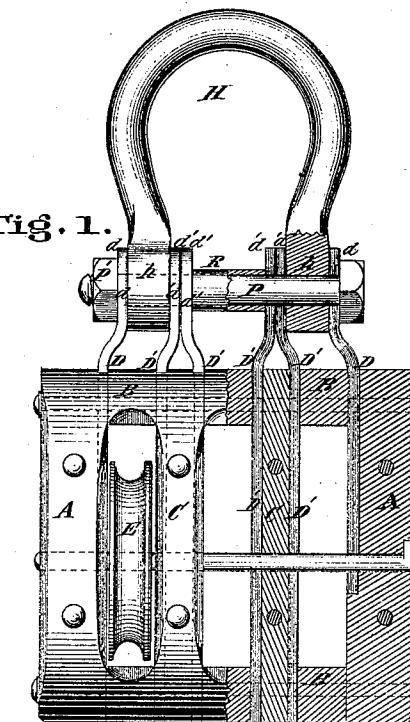


Fig. 1.

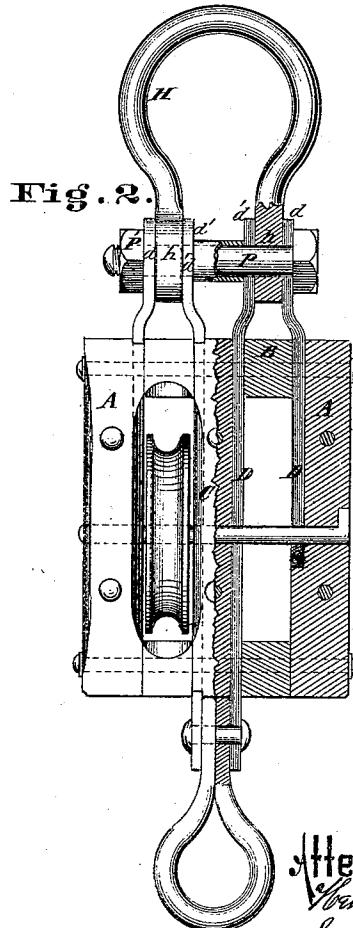


Fig. 2.

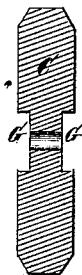


Fig. 3.

Attest

Henry Millward  
J. G. Layman

Inventor.

Joseph F. Harcourt  
By J. Millward  
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# United States Patent Office.

JOSEPH F. HAROURT, OF CINCINNATI, OHIO.

*Letters Patent No. 106,933, dated August 30, 1870.*

## IMPROVEMENT IN TACKLE-BLOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, JOSEPH F. HAROURT, of Cincinnati, Hamilton county, State of Ohio, have invented a certain new and useful Improvement in "Tackle-Blocks;" and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable one skilled in the art to which my invention appertains to make and use it, reference being had to the accompanying drawing making part of this specification.

### *Nature and Objects of Invention.*

My improvement relates to the tackle-block with grooved cheeks and partitions fitted with iron straps, for which Letters Patent were granted to me June 9, 1868, and consists of a certain new and peculiar device for connecting the straps of the grooved cheeks and partitions to the clevis of the block; the object of my invention being to reduce the cost and difficulty of manufacture of this construction of tackle-block, and provide a connection better adapted for the manufacture of large blocks, where great strength and stiffness are required.

### *Description of the Accompanying Drawing.*

Figure 1 is an elevation, partly in section, of a three-sheave block, embodying my invention.

Figure 2 is a similar view of a two-sheave block.

Figure 3 is a cross-section of one partition.

### *General Description.*

The cheeks A, end pieces B, and partitions C are connected together, and the straps D D' fitted into the grooves G G' in the same manner as shown in my patent of June 9, 1868.

The straps D D' are not connected together to form the clevis by welding, as in my patent aforesaid, but are slightly bent and formed, by drilling or punching

with eyes d d', for the reception of a bolt, P, which is made to pass through all the straps, as shown.

The clevis H is bent to the desired form, and constructed with eyes h at the ends, through which the bolt P passes, the ends of the clevis fitting between the straps in the manner shown.

The bolt P is provided with a nut, P', by which the parts can be drawn together, a sleeve, R, or other suitable device, being inserted between the inner straps, to form an abutment, against which the straps are forced by the action of the bolt.

It will be seen, by reference to the drawing, that all the parts of this tackle-block can be finished separately, and to a "template" or gauge, and the block can, therefore, be manufactured cheaply, rapidly, and conveniently. For large, powerful, or wide blocks it is stronger, more durable and efficient, and less liable to twist between the block and clevis than the one patented by me June 9, 1868, inasmuch as this construction admits of the strain upon the straps being more equally divided, and the straps directed toward the clevis in equal angles.

### *Claim.*

In the described connection with a tackle-block constructed with grooved and strapped cheeks and partitions A O D D' G G',

I claim—

The provision of the eyes d d', bolt and nut P P', and eye-ended clevis H h, combined substantially in the manner and for the purpose specified.

In testimony of which invention I hereunto set my hand.

J. F. HAROURT.

Witnesses:

FRANK MILLWARD,  
J. L. WARTMANN.