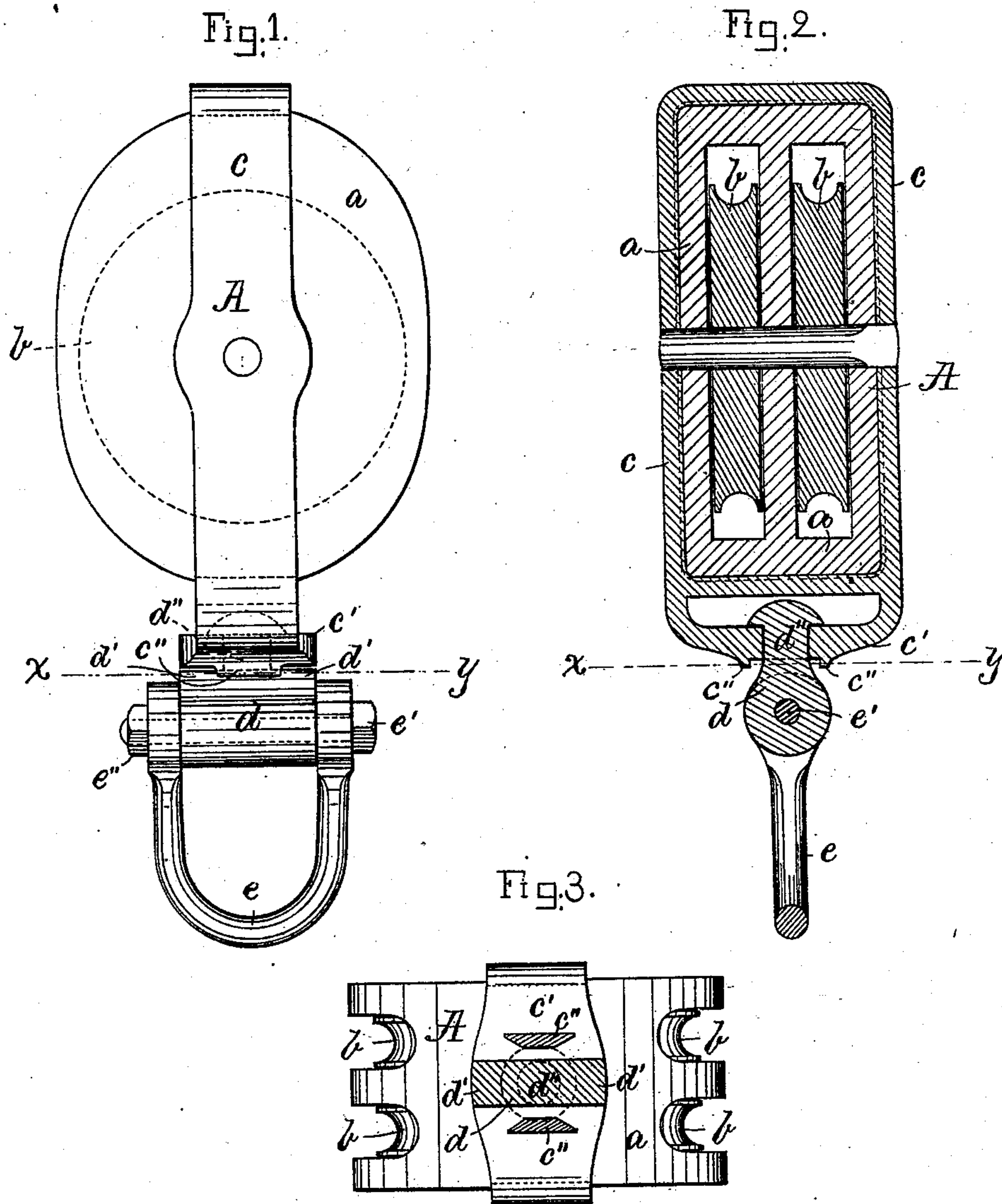


(No Model.)

A. BACHMAN.  
PULLEY BLOCK.

No. 272,186.

Patented Feb. 13, 1883.



Witnesses.

Henry Chadbourne.  
J. Allen.

Inventor.

Albert Bachman



# UNITED STATES PATENT OFFICE.

ALBERT BACHMAN, OF SHELBURNE, NOVA SCOTIA, CANADA, ASSIGNOR OF ONE-THIRD TO JAMES W. YOUNG, OF BOSTON, MASSACHUSETTS.

## PULLEY-BLOCK.

SPECIFICATION forming part of Letters Patent No. 272,186, dated February 13, 1883.

Application filed August 28, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT BACHMAN, a citizen of Dominion of Canada, residing at Shelburne, in the county of Shelburne, Nova Scotia, Canada, have invented certain new and useful Improvements in Pulley-Blocks; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

10 This invention relates to improvements in pulley-blocks; and it consists in providing the block with a metal strap, either inside or outside of the shell of the block, which strap has a loop projecting from one end, to which is swiveled a piece of metal in such a manner as to allow the block to turn on the swivel and conform itself to the direction in which the fall of the block is being pulled, thereby preventing the fall from chafing against the shell of the block and wearing out the fall and also the shell of the block, as well as twisting the block out of shape, as is the case with the ordinary blocks. To the end of the swiveled piece of metal is secured the shackle by means of a bolt in the usual manner. I prefer to make the swiveled piece from a flat piece of metal, as shown, thereby forming shoulders on opposite sides of the swivel; and, also, I prefer to provide the loop on the strap of the block with projecting stops, against which the shoulders on the swivel strike and prevent the block from turning entirely around on the swivel, causing the tackle to be twisted; but such shoulders and stops may be dispensed with and the swivel made of a piece of metal of any other form, and the block allowed to turn entirely around on the swivel, if so desired, without departing from the spirit of my invention.

Heretofore blocks have been made in which the shackles have been secured to a projection made in one piece with the strap of the block, or to an eyebolt firmly secured to the block. Such blocks are objectionable, because it is necessary sometimes to pull the fall in a direction which causes the fall to chafe against the shell of the block and wear out the fall and shell, as well as twist the block out of shape, because the block cannot turn and conform itself to the direction in which the fall is being pulled.

50 By using this my improved block these objec-

tions are entirely overcome, as the block will turn on the swivel and conform itself to the direction in which the fall is being pulled. This my improved block is more especially adapted to be used as a sheet-block on board of sailing-vessels, where it may either be attached to the traveler, or to a crane, or to the boom, in the usual manner, by means of the shackle, and it is constructed as follows, reference being had to the accompanying drawings, on which—

Figure 1 represents a side elevation of my improved block. Fig. 2 represents a central longitudinal section, and Fig. 3 represents a cross-section on the line *x y* shown in Figs. 1 and 2.

Similar letters refer to similar parts on the different parts of the drawings.

A represents the block, which is composed of the shell *a*, having one or more sheaves, *b b*, and a strap, *c*, all arranged in the usual manner. Welded or otherwise secured to the strap *c* is a loop, *c'*, to which is swiveled the piece of metal *d*, which is shown as having shoulders *d' d'* on opposite sides, which strike against the projections *c'' c''* on the loop *c'*, to prevent the block A from turning entirely around on the swivel *d''* on the metal piece *d*, for the purpose described.

*e* represents a shackle secured to the metal piece *d* by means of the bolt *e'* and nut *e''*, in such a manner that the bolt *e'* forms a hinge on which the block A and swiveled metal piece *d* may turn, as usual. It will be seen by this arrangement of the connections of the block A to either the traveler, or a crane, or a boom of a vessel that the block A may turn on the swivel *d''* and bolt *e'*, and conform to any direction in which the fall of the block may be pulled, and thus prevent the fall from chafing against the shell *a* of the block A.

In the drawings the strap *c* is shown as an outside strap; but I do not wish to confine myself to the use of an outside strapped block, as I may with equal advantage apply my invention to an inside strapped block; also, the loop *c'* may be dispensed with and the metal piece *d* be swiveled to the strap *c* without departing from the spirit of my invention. In case I dispense with the loop *c'*, I make the projections *c'' c''* on the strap *c*.

Having thus fully described the construction and operation of my invention, I wish to secure by Letters Patent, and claim—

1. In a pulley-block, the shell *a*, sheave or  
5 sheaves *b b*, and strap *c*, in combination with the loop *c'* and stop projections *c'' c''* thereon, the swiveled metal piece *d*, with its swivel *d''* and shoulders *d' d'*, adapted to stop against the projections *c'' c''*, and shackle *e*, with its  
10 bolt *e'* binged to the metal piece *d*, substantially as and for the purpose set forth and described.

2. In a pulley-block, the strap *c*, extended in

one end to form a loop, *c'*, and provided with stop projections *c'' c''*, in combination with the  
15 metal piece *d*, secured to and adapted to swivel in the loop *c'*, and having the shoulders *d' d'*, to serve as stops against the projections *c'' c''*, substantially as and for the purpose set forth  
20 and described.

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

ALBERT BACHMAN.

Witnesses:

HENRY CHADBURN,  
L. N. MÖLLER.