

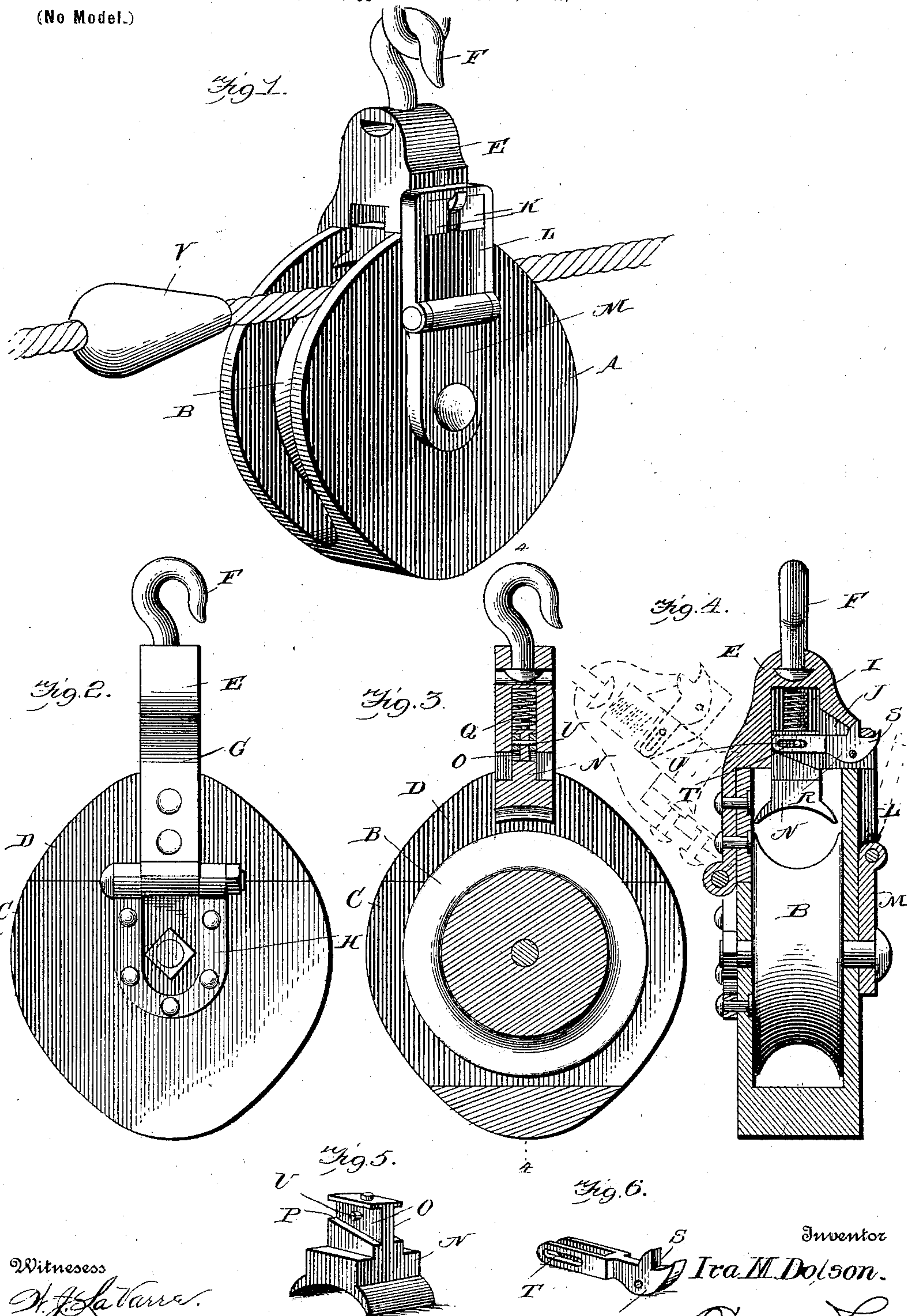
No. 610,172.

Patented Sept. 6, 1898.

I. M. DOTSON.
PULLEY BLOCK.

(Application filed Oct. 29, 1897.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

IRA M. DOTSON, OF SANBORN, MINNESOTA.

PULLEY-BLOCK.

SPECIFICATION forming part of Letters Patent No. 610,172, dated September 6, 1898.

Application filed October 29, 1897. Serial No. 656,812. (No model.)

To all whom it may concern:

Be it known that I, IRA M. DOTSON, residing at Sanborn, in the county of Redwood and State of Minnesota, have invented a new and useful Pulley-Block, of which the following is a specification.

This invention relates to improvements in pulley-blocks; and the object of the same is to provide a block which is adapted to automatically release the rope or cable to permit the passage thereby of an object supported by the cable.

In the art of logging it is customary to use pulley-blocks for conducting the cable upon which the logs are carried in different directions, and when the log reaches one of these blocks the cable must be stopped until the block can be disconnected therefrom, thus causing delay and a constant stopping and starting of the motive power. My improved pulley-block is designed to obviate these difficulties by automatically releasing the cable to permit the passage of the log.

With the above object in view the invention consists of a pulley-block having one of its sides formed in two sections which are hinged together, a head carried by said hinged side, a keeper hinged to the opposite side of the block and adapted to engage the head, a pivoted latch carried by the head for engaging the keeper, a tripping-bar for disengaging the latch from the keeper, and a tripping-cone carried by the cable for engaging the tripping-bar and actuating the same.

The invention further consists in the improved construction, arrangement, and combination of parts hereinafter fully described, and afterward specifically pointed out in the claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, having reference to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved pulley-block, showing the cable and tripping-cone. Fig. 2 is a side elevation of the block. Fig. 3 is a vertical longitudinal sectional view of the same. Fig. 4 is a vertical transverse section, dotted lines showing

the position of the head when tripped. Fig. 5 is a perspective view of the tripping-bar. Fig. 6 is a perspective view of the latch.

Like letters of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the accompanying drawings, A is the pulley-block, and B the sheave, one side of the block being formed of the sections C and D.

The head E carries the hook F, by means of which the pulley-block is suspended from any desired object and having the strap G depending from one side thereof and secured to section D of the block. This strap constitutes one member by means of which section D is hinged to section C, the other member H of said hinge being secured to the lower section C. The head E is provided with the central passage I and with the vertical transversely-extending recess J, which recess opens through the front wall of the head, and formed on said front wall on opposite sides of the recess are the lugs K.

The keeper L, consisting of a rectangular frame, is hinged at its lower end to the strap M, secured to the front wall of the pulley-block, said keeper adapted to extend over the lugs K when the pulley-block is closed, as illustrated in Fig. 1.

The tripping-bar is movable vertically in cavity I of the clevis-head, said tripping-bar consisting of the head N, which is concaved on its lower face, as illustrated, and having the horizontally-extending recesses O formed on opposite sides of the stem, the bottom walls P of said recesses being inclined downwardly and forwardly, as illustrated. A coiled spring Q is positioned within the cavity I and bears at one end against the upper end wall of said cavity and at its lower end against the stem of the tripping-bar, serving to hold it normally pressed downwardly.

The latch consists of the head R, having the engaging member S, which is adapted to engage the keeper and retain it in its position securing the head E, and with the slotted arms T, said arms adapted to extend in the recesses O on opposite sides of the stem of the tripping-bar, with the pins U, carried by the tripping-bar, engaging the slots. This latch is pivoted at its head in the transversely-extend-

ing recess J of the head E, and as the tripping-bar is moved upwardly the rear end of said latch is elevated, which depresses its forward engaging end and releases the clevis
 5 from the keeper, thus permitting the sheave and head to separate, said movement being caused by the weight of the log upon the cable.

For tripping the tripping-bar I provide the cone V, which is placed upon the cable in advance of the log with its smaller end foremost,
 10 said cone engaging the concaved lower surface of the tripping-bar and raising the same, as will be readily understood.

From the above description it will be seen
 15 that I have produced an improved pulley-block, which will automatically release the cable before the log reaches the block to permit the passage thereby of the said log, thus avoiding the necessity of stopping the motive
 20 power until the block is detached from the cable by hand.

While I have illustrated and described the best means now known to me for carrying out my invention, I do not wish to be understood
 25 as restricting myself to the exact details of construction shown and described, but hold that any slight changes or variations, such as might suggest themselves to the ordinary mechanic, will properly fall within the limit
 30 and scope of my invention.

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

1. In a pulley-block, the combination with
 35 a block carrying the pulley, of the head hinged to one of the sides of the block, means for uniting the head to the opposite side of the block, and a tripping mechanism carried by the said head for automatically releasing the same
 40 from its securing means, substantially as described.

2. In a pulley-block, the combination with a block carrying the pulley, of the head hinged to one of the sides of the said block, a keeper
 45 for engaging and uniting the head to the opposite side of the block, a latch carried by the head for engaging said keeper and holding it in engagement with the head, and a tripping mechanism for automatically disengaging
 50 said latch from the keeper, substantially as described.

3. In a pulley-block, the combination of the head pivoted to one side of the block, a keeper carried by the opposite side of the block, a latch carried by the head for engaging said
 55 keeper, a tripping-bar movable within the head and adapted to disengage the latch from the keeper, and means carried by the cable for actuating said tripping-bar, substantially as set forth. 60

4. In a pulley-block, the combination of the head pivoted to one of the sides of the block, a keeper carried by the other side, a slotted latch pivoted in the head and adapted to engage said keeper, a tripping-bar movable vertically in the head and having a pin engaging the slot of the latch, and means for effecting the movement of said tripping-bar, substantially as set forth. 65

5. In a pulley-block, the combination of the
 70 head pivoted to one of the sides of the block and having lugs projecting therefrom, a keeper pivoted to the other side of the block and adapted to engage the lugs of the head, a latch carried by the head for engaging the
 75 keeper, a tripping-bar for disengaging said latch from the keeper, and means for automatically actuating said tripping-bar, substantially as set forth.

6. The combination of a pulley-block having one of its sides formed in sections and hinged together, a head carried by the movable section, a keeper carried by the other side of the block, a latch carried by the head and adapted to engage said keeper, a tripping-bar adapted to disengage said latch from the keeper, and means for actuating said tripping-bar, substantially as set forth. 80

7. In a pulley-block, the combination of a head pivoted to one of the sides of the block,
 90 a keeper carried by the other side of the block, a latch carried by the head adapted to engage the keeper, a tripping-bar adapted to disengage the latch from the keeper, and a tripping-cone carried by the cable adapted to engage and actuate the tripping-bar, substantially as set forth. 95

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Witnesses:

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