

(No Model.)

F. D. GOSNELL & J. E. THOMAS.
PULLEY BLOCK.

No. 598,776.

Patented Feb. 8, 1898.

Fig. 1.

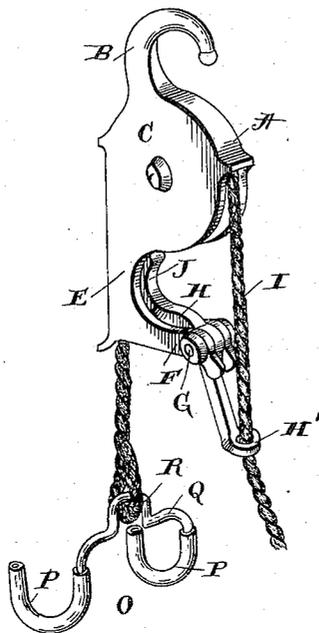


Fig. 2.

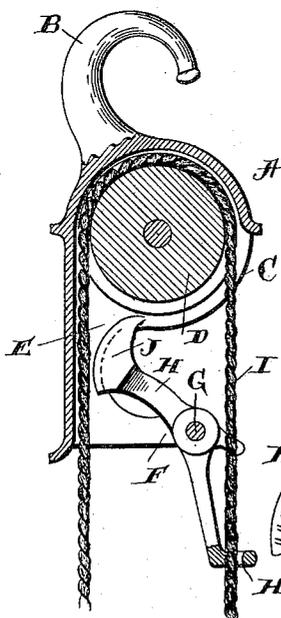


Fig. 3.

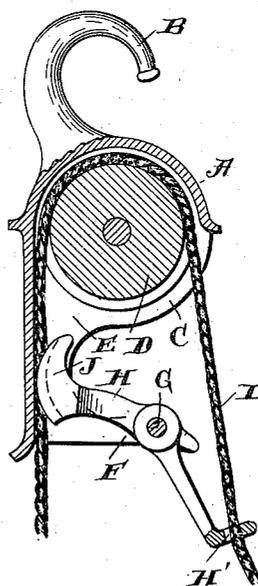
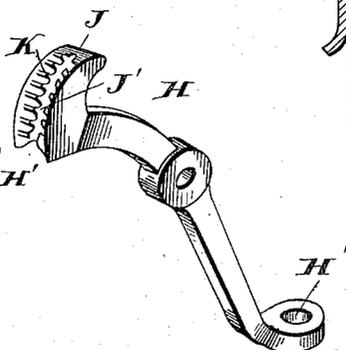


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK D. GOSNELL AND JAMES E. THOMAS, OF TERRE HAUTE, INDIANA.

PULLEY-BLOCK.

SPECIFICATION forming part of Letters Patent No. 598,776, dated February 8, 1898.

Application filed June 29, 1897. Serial No. 642,855. (No model.)

To all whom it may concern:

Be it known that we, FRANK D. GOSNELL and JAMES E. THOMAS, of Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Pulley-Blocks; and we 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to pulley-blocks; and the object thereof is to provide the block with an improved lock adapted to be operated by the hoisting-rope for securing the latter, with its load, at the desired elevation.

The invention consists in the novel features of construction and in the combination and arrangement of parts hereinafter fully described and claimed, and illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of the block. Fig. 2 is an elevation of the same, one side of the block-casing being removed, with the locking-dog out of operation. Fig. 3 is a similar view, the rope being locked by the dog. Fig. 4 is a detail view of the dog.

The block-casing A and suspension-hook B are preferably, though not necessarily, formed of a single casting. The upper portion C of the casing is of circular form and closed at its upper side to incase an ordinary grooved pulley D. Depending from one side of this circular portion is the channeled portion E, which terminates in the ears F, extending horizontally beneath pulley D, and at their outer ends formed with apertures to receive pin G, upon which locking-dog H is pivoted. The latter is curved slightly with its convex edge uppermost, and at its lower and outer end carries eye H', through which the free portion of hoisting-rope I extends, and at its inner end carries the curved peripherally-grooved jaw J. This jaw is formed with the central deep groove J' in the bottom of the curved edge, and on opposite sides of this deep groove and in said curved edge are serrations K. The active or hoisting portion of the rope extends upward between said jaw and the back of channeled portion E, and when the object being lifted is at the desired

elevation the free or slack side of the rope is drawn laterally away from the hoisting portion, thus raising the lower end of the locking-dog and throwing its inner or jaw end against the rope and forcing the latter against the back of channeled portion E, and owing to the particular form of jaw here shown and described the same takes secure hold upon the rope, and when the elevating means is released and the whole weight of the lifted article brought upon the dog the grip of the jaw will be rendered even more secure, as its action is in the nature of a clutch with its gripping or holding strength dependent somewhat on the weight of the article being elevated.

The pulley-block is designed with particular reference to use in hoisting bicycles, as in moving same from one floor to another of a building, or when suspending same when making repairs, and for this use we provide for the rope end the double-ended hook O, the hooks being preferably covered with rubber P to prevent scratching, while the back Q is formed with offset R where the rope is attached to keep the latter in central position. It will be understood, however, that its use is not limited, as it may be employed in any connection where a rope-lock is required, or even where a lock is not required, as the normal position of the free side of the rope is such as to hold the dog from engagement with the active portion.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. An improved pulley-block comprising a casing having a depending extension adapted to form a rope-bearing surface, a pulley within the casing, a dog pivoted between its ends adjacent the pulley and one end adapted to clamp the active side of the rope against the casing extension, the active end and the free end of the dog being out of line with the pivotal point so that the said free end may depend in vertical line with one side of the pulley when the dog is inactive, the said free end of the dog being loosely connected to the inactive side of the rope, whereby when said inactive side of the rope is given a straight downward pull it will pass free of the dog, but when given a lateral movement it will

turn the dog to a locked position, substantially as shown and described.

2. An improved pulley-block, comprising a casing having a downward extension forming a rope-bearing surface, a pulley in the upper portion of the casing, a dog pivoted between its ends beneath and in line with the pulley and at one end adapted to clamp the hoisting side of the rope to the bearing-surface of the casing, and the opposite end of the dog formed with an eye adapted to embrace the inactive side of the rope, the dog being operated by laterally swinging the rope, substantially as shown and described.

3. An improved pulley-block, comprising a casing having a depending channeled extension through which the hoisting side of the

rope passes, said extension terminating in the ears F extending horizontally beneath the casing-body, a dog pivoted to swing vertically between said ears and at one end adapted to clamp the rope in the channeled extension of the casing, and at its opposite end formed with an eye adapted to embrace the inactive side of the rope, and a pulley journaled in the upper portion of the casing, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANK D. GOSNELL.

JAMES E. THOMAS.

Witnesses:

CHAS. D. FLAID,
JOHN THACKER.