(No Model.)

J. HOLT.

DIFFERENTIAL PULLEY BLOCK.

No. 428,675. Patented May 27, 1890.

Fig. 1.

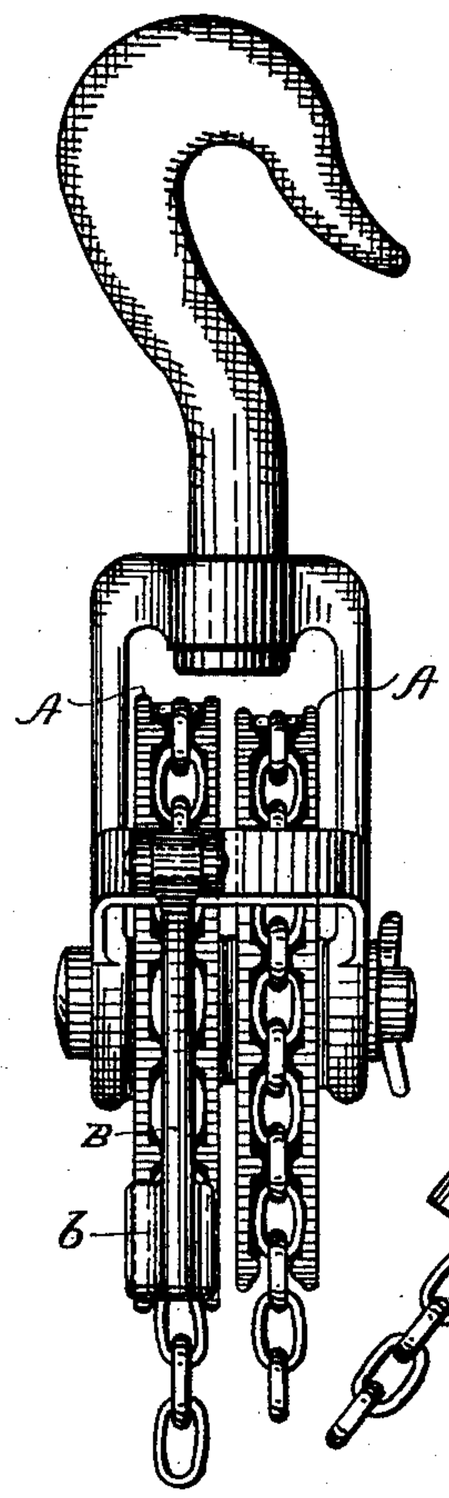


Fig. 2.

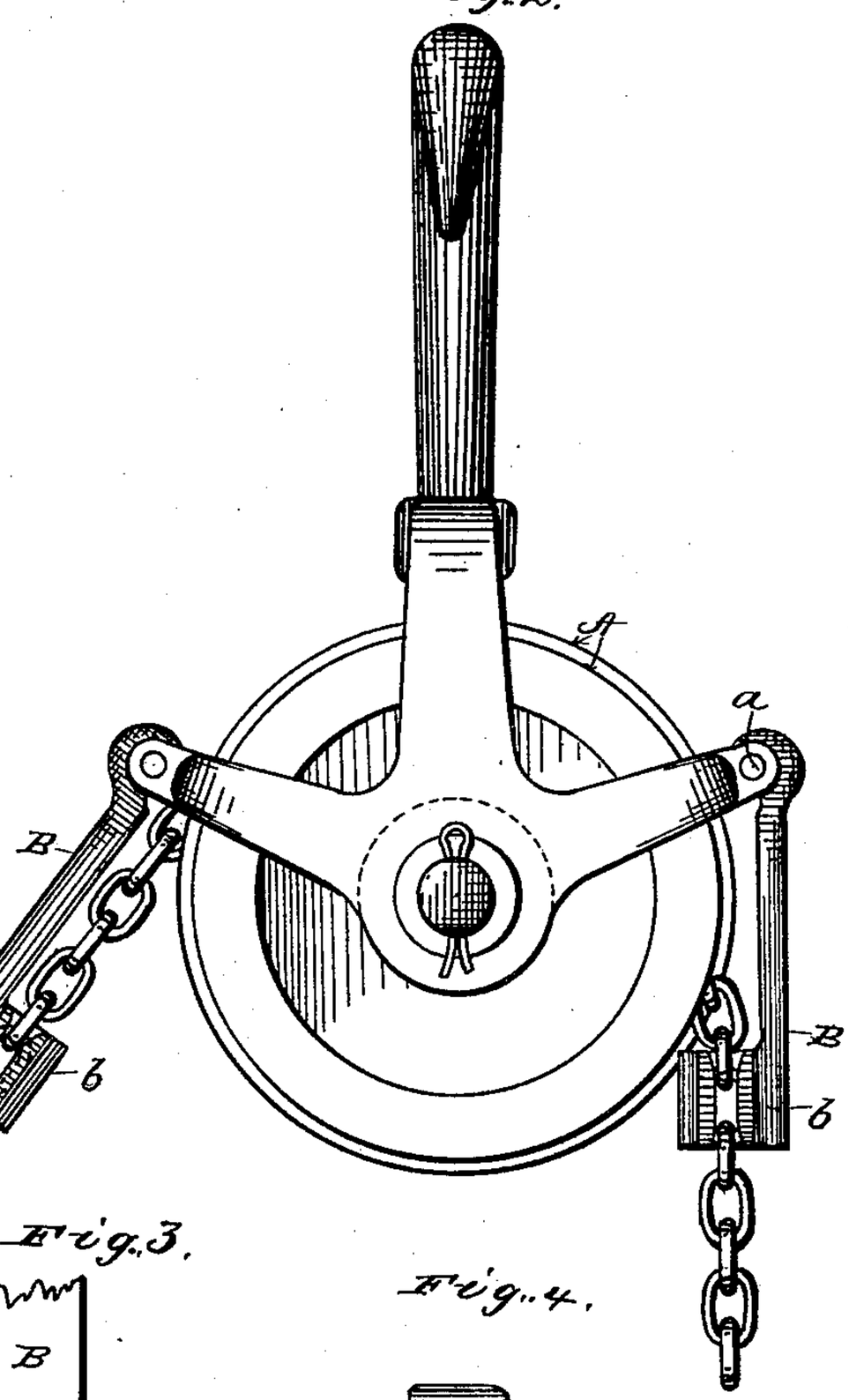


Fig. 3.

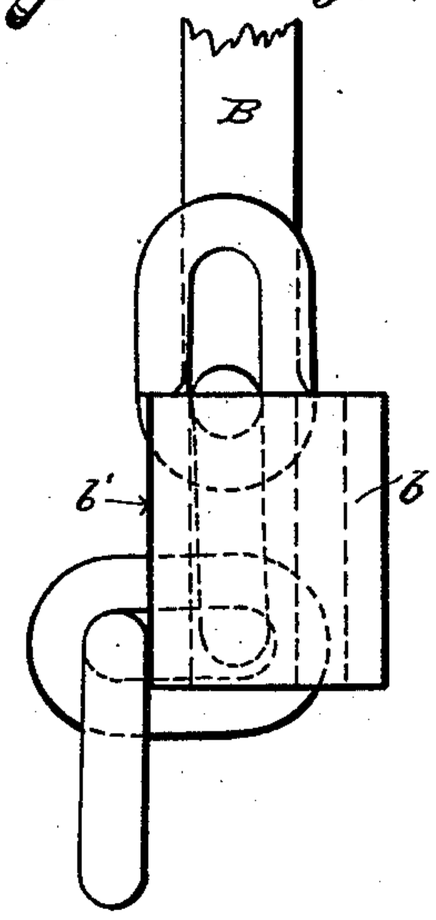
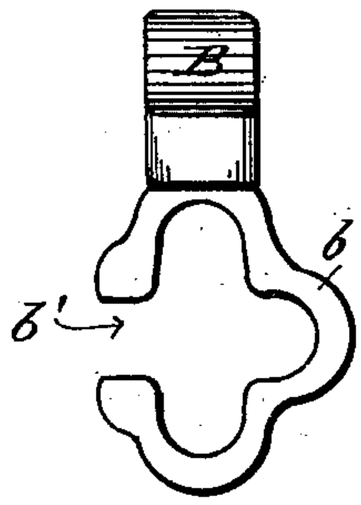


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

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DIFFERENTIAL PULLEY-BLOCK.

SPECIFICATION forming part of Letters Patent No. 428,675, dated May 27, 1890.

Application filed February 7, 1890. Serial No. 339,513. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HOLT, of Cradley Heath, in the county of Stafford, England, have invented certain new and useful Improvements in Differential Pulley-Blocks; and I 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 the same.

My invention relates to improvements in differential pulley-blocks, the novel feature comprising a chain-guide, consisting of an arm pivoted to the frame or casing of the sprocket-block, so as to turn in the same plane as the sheave on which the hand-chain winds, the free end of such arm being provided with a loop through which the chain passes loosely, whereby the chain is kept from twisting and is properly guided in its movements to and from the sheave.

In the accompanying drawings, Figure 1 is an edge view. Fig. 2 is a side elevation. Fig. 3 is an enlarged elevation in detail. Fig. 4 is an enlarged bottom plan in detail.

The differential pulley-block, one of which is shown at A, may be substantially as heretofore constructed, except that the frame or casing of block A has provision for pivotally attaching arm B at *a*, so that the arm may swing in the same plane as the sprocket-wheel that is opposite the arm, and on which sheave the hand-chain winds. Arm B, at the free end thereof, has a loop *b*, adapted to receive the chain loosely, as shown more clearly in Fig. 4. The one side of the loop is slotted at *b'* the entire length of the loop for receiving the chain. To enter the hand-chain in the loop, one link thereof is turned at right angles with the axis of the loop, and such link is advanced through the slot. (See Fig. 3.) The loop holds the chain from twisting and at the same time guides the chain in its movements to and from the sheave, and this, too, regardless of the lead of the hand-chain, whether leading horizontally, vertically, or at any intermediate angle.

The device is simple, inexpensive, and efficient.

What I claim is—

The combination, with a differential pulley-block, of a chain-guide comprising an arm pivoted to the sprocket-block, so as to turn in the same plane as the opposing sheave, the free end of such arm having a loop adapted to fit the chain loosely, such loop having a slotted side for entering the chain, substantially as set forth.

In testimony whereof I sign this specification in the presence of two witnesses, this 12th day of November, 1889.

JOSEPH HOLT.

Witnesses:
F. M. BURTON,
E. HARKER.