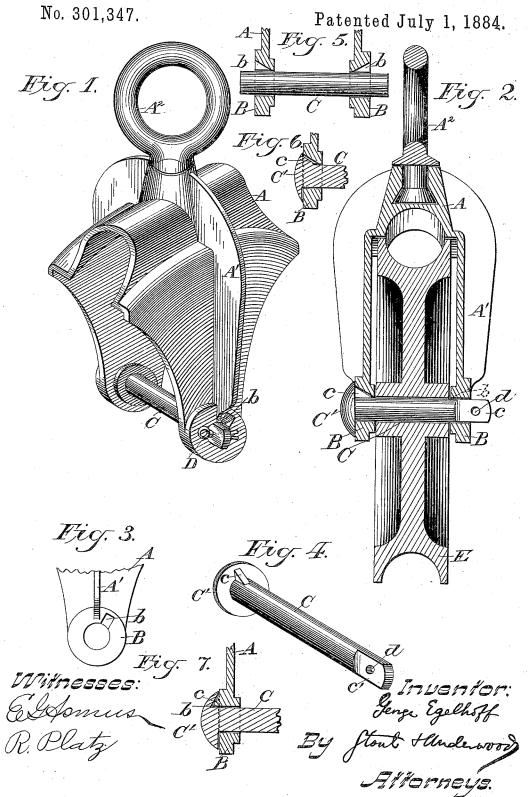
## G EGELHOFF.

PULLEY BLOCK.



## United States Patent Office.

GEORGE EGELHOFF, OF MILWAUKEE, WISCONSIN.

## PULLEY-BLOCK.

SPECIFICATION forming part of Letters Patent No. 301,347, dated July 1, 1884.

Application filed May 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, George Egelhoff, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented cer-5 tain new and useful Improvements in Pulley-Blocks; and I do hereby declare that the following is a full, clear, and exact description

My invention relates to the construction of 10 pulley-blocks; and it consists in certain peculiarities of such construction, all as will be

more fully set forth hereinafter.

In the drawings, Figure 1 is a perspective view of one of my improved pulley-blocks 15 with the sheave removed. Fig. 2 is a vertical section of the same with the sheave in place. Fig. 3 is a detail view of one of the lower ends of said block in elevation. Fig. 4 is a perspective view of the preferred form of bolt 20 made by casting. Figs. 5 and 6 illustrate another method of forming the bolt, and Fig. 7 illustrates a modification.

A is the pulley-block, which is of ordinary construction, except in its lower ends, B B, bereinafter described. The said block has an outside strengthening-ridge, A', and a swiveled ring,  $A^2$ , at the top. The lower ends, BB, are preferably shaped or rounded to form seats for the head C' of the bolt C, which forms 30 the stationary axle or journal on which the sheave E revolves, and each end B has on its outside the delta-shaped depression or groove b, of a shape exactly corresponding to that of a lug or projection, c, formed on the inside of the head C' of the bolt C. The other end of this bolt, in its preferred form, (made by casting, Fig. 4,) is slightly reduced, as at e', and provided with a hole, d, to receive a pin or

One object of making the depression b in the outside of each of the ends B of the pulley-block is so that the bolt C may be slipped in from either side of the block at any time, as found most convenient; but another reason is

45 this: Instead of using a bolt, C, cast with the lug c upon it, as described, it may sometimes happen that a bolt or piece of iron, either malleable or wrought, may be preferred on account of its greater strength, and in such case the 50 said bolt, of proper length but plain at each

end, as shown in Fig. 5, is used; and each end is upset or hammered to form a head, C', Fig. 6, and then, the iron being hot, in the process of hammering, a part of the said head thus formed is forced into the delta-like depressions 5: b, forming thus the locking-lugs c, as shown in said Fig. 6, on each end of the bolt C.

A further and obvious modification is illustrated in Fig. 7, wherein the depression b is formed in the bolt-head C', and the lugs c on 6c the ends B of the pulley-block, instead of the reverse, as described, the function and operation of my device being of course the same in

either instance.

When the parts of my device are put to- 6 gether and fastened, as shown and described, a simple, cheap, and very effective lock is thus produced, and the bolt C is prevented from turning, thus greatly diminishing friction in the revolution of the sheave, and obviating 7c the necessity of putting on extra secure fastening devices and washers at each end of the bolt.

It is not absolutely necessary that the depression b and lug c should be triangular or 75 delta-shaped, but only that the form of one should exactly correspond to the shape of the other; but the shape shown I have found the most desirable in ordinary cases.

Having thus described my invention, what I 8c claim as new, and desire to secure by Letters

Patent, is-

1. In a pulley-block, the combination of the lower end of the block with the sheave-bolt, one being provided with a depression, and the 85 other with a projection or lug of corresponding shape, whereby when the bolt is in place it is securely locked against a tendency to revolve, substantially as shown and described, and for the purpose set forth.

2. In a pulley-block, the combination of the lower ends, BB, having triangular grooves b b formed in their outer surfaces, with the sheave-bolt C, having a lug, c, of shape corresponding to that of the grooves b, formed 95 on its head C', substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

GEORGE EGELHOFF.

Witnesses:

H. G. UNDERWOOD, H. J. FORSYTHE,