Jan. 13, 1942. P. E. KEENEY 2,269,768

LOGGING BLOCK

Filed March 13, 1940

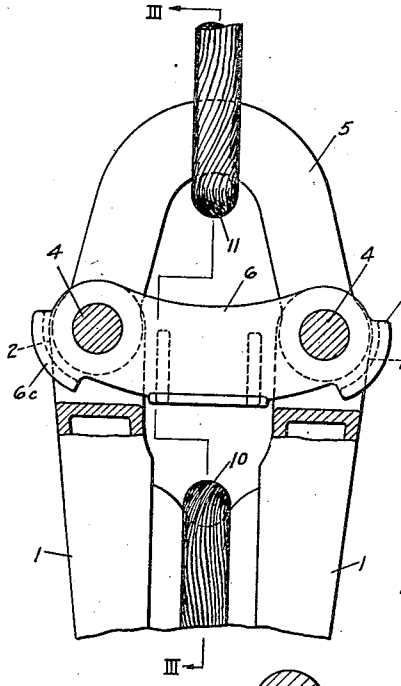


Fig. I

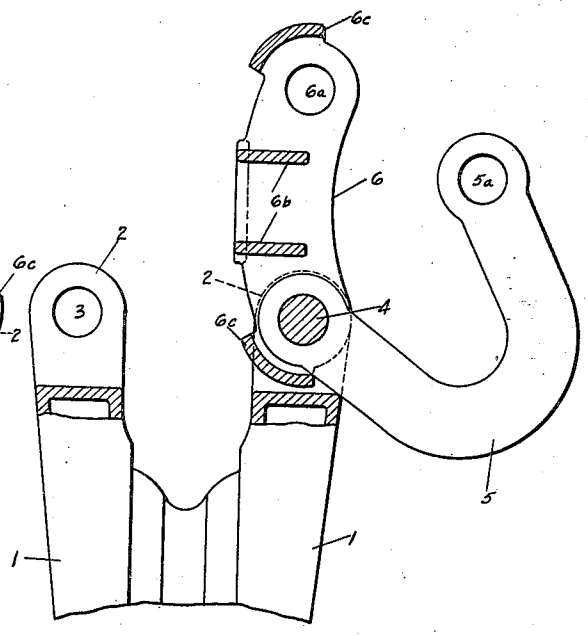


Fig. II

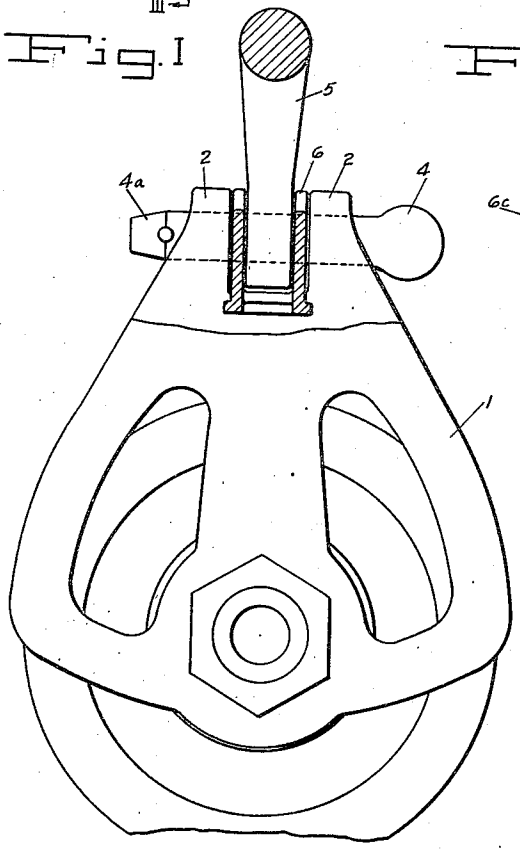


Fig. III

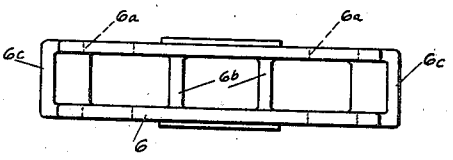


Fig. IV

INVENTOR
PAUL E. KEENEY
BY G. F. McDougall
ATTORNEY

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LOGGING BLOCK

Paul E. Keeney, Portland, Oreg.

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1 Claim. (Cl. 254—193)

This invention relates to a heavy duty single sheave block, such as used in the logging industry.

A logging block is almost invariably hung on a convenient tree and since placement of the tree was made first, it quite often results in a line bight that is not ideal. Logging downhill results in almost unbelievable line whip, hence a smooth external outline of the block, absolute prevention of the load line entering the shackle and a proper normal placement of the anchor and load lines must feature the block.

Wire lines are short lived in the logging industry, hence develop broken wire ends very fast and the rigging man handling them must wear heavy gloves or ruin his hands, so a block must be constructed so that lines may be put in and out in the shortest possible time with the handicap of heavy leather gloves.

The specific structural change in the present block is the inside cross-head, the use of which contributes to smooth exterior and improved structural strength. It is operable by one gloved hand to open the block to receive the strap, to receive both the strap and the load line in different places, then to close the block with one hand and insert the necessary pin with the other.

It is therefore the object of the invention to improve the well known logging block by the addition of an improved inside cross-head which is faster and more easily handled and results in a block exterior that is smoother and much less liable to hold a twist in the load line it carries when the line is violently agitated.

This and other objects that will be apparent from the description that follows, constitute the purposes of the invention, the novel features of which are claimed at the conclusion of the specification.

I accomplish the stated objects by the structural arrangements and combinations substantially as illustrated in the accompanying drawing, in which:

Fig. I is a view of the upper part of a logging block, equipped with an inside cross-head, with two of the four ears of the block sectioned off, to show the cross-head in full lines, closed position;

Fig. II shows the same structure as in Fig. I but with the cross-head and shackle completely opened to receive the load line and strap, both of which are indicated in Fig. I but omitted in Fig. II;

Fig. III is a section on the line III—III, Fig. I, but showing a nearly complete block; and

Fig. IV is a plan view of the inside cross-head, ready for insertion in the block.

The block sides 1 are steel stampings or castings, each of which is provided with upstanding ears, or pin lugs, 2, provided with aligned pinholes 3 within which pins 4 are inserted to hold a shackle 5, which is likewise provided with pinholes 5a adapted to registry alignment with the pinholes in the pin lugs.

I also provide an inside cross-head 6 of channel section of such width that it enters smoothly between the lugs 2 and contains the two ends of the shackle 5. It is provided with holes 6a in the flanges at each end, of the same spacing and size as those in the ear lugs 2 and the shackle 5. It will be at once understood that when the parts are placed together, absolute alignment of the several holes is not required for practically instantaneous insertion of the pins 4, that being taken care of by making the holes and other parts so that the taper portion 4a of the pin 4 will always enter, which will accomplish the alignment.

The inside cross-head may have a solid bottom or it may be skeletonized by the ribs 6b, but in any event it should have the quarter bars 6c which are so positioned that they will be contacted by the corresponding leg of the shackle 5 whereby the cross-head may be swung upwards and outwards to admit the load line 10 as shown in Fig. II, and it will be at once apparent that the shackle can be partially opened to admit the strap 11 without a special view showing the position, and without raising the cross-head from between the ear lugs 2. Reverse movement, by one hand, will close the shackle and cross-head whereupon the pin which has been removed for the purpose of inserting or removing a line or lines can be replaced with the other hand.

If the inside cross-head is a steel casting I prefer to make the quarter bars substantially as shown, as the best form; but if it is a steel stamping, carrying the center plate between the flanges clear out to the end will serve the purpose, but less effectively

I am aware that cross-heads made in the form of an external clevis, such as shown in Patent No. 1,145,110, have been used; and also inside two piece cross-head bars, one on each side of the shackle, and both inside the ear lugs, have been proposed.

I am not aware, however, that the strength preserving structure, ease of manipulation and

importantly the generally smooth external outline of the block for the object stated has ever been achieved before. It is not believed that the two piece cross-head has ever been used because of its time consuming difficulty of manipulation and lack of the quarter bars 6c which cause it to follow the shackle when the latter is opened for the handling of lines, and force the cross-head down in place upon reverse movement of the shackle.

It will be noted that the structure does not weaken the double shear application of load on the pins 4, which therefore need be of no greater section than before.

It has been generally known for some time that a pear shaped plan for a block sheave housing with well rounded edges, was far the best to clear the line under pull when previous violent thrashing had thrown one or more twists in the bight that contained the sheave, but the narrow upper part must be relatively short for some reason and the general outline of a bowling pin will not do. Shape per se belongs to anyone, but improved structural features that make the desirable shape possible without sacrifice of strength do not.

Having fully disclosed my invention, what I claim as new and desire to secure by Letters Patent, is:

A cross-head for a logging block comprising a generally channel shaped section cross-head member provided with pinholes adapted to register with similarly spaced pinholes in a block and with pinholes in a shackle when both legs of such shackle are placed between the side members of the channel, characterized by unitary end closure members, the upper surfaces of which are positioned below the tops and above the bottoms of the pinholes.

PAUL E. KEENEY.