July 10, 1956

F. L. LE BUS, SR

2,754,084

SNATCH BLOCK

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Fig 5

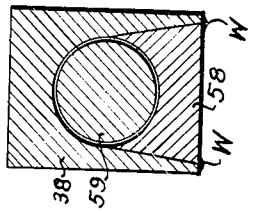


Fig 4

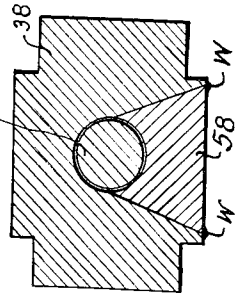


Fig 3

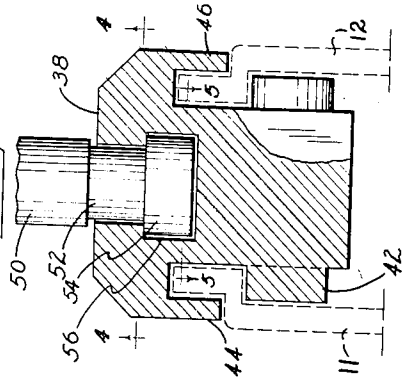


Fig 6

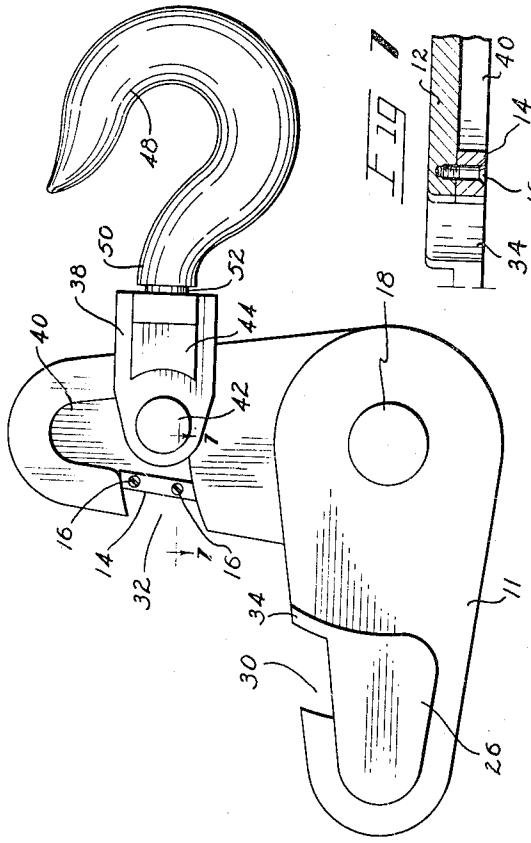


Fig 7

Fig 2

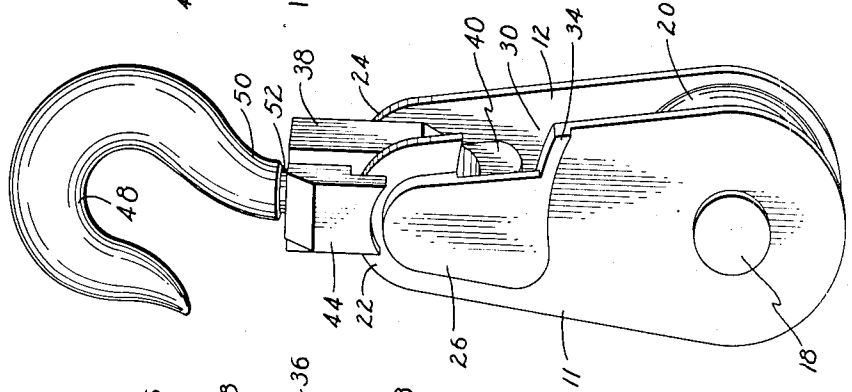
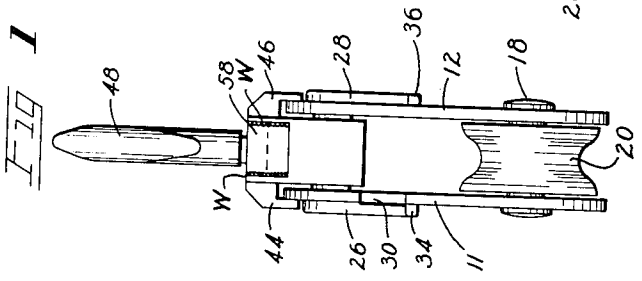


Fig 1



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2,754,084

SNATCH BLOCK

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Application January 8, 1954, Serial No. 402,930

6 Claims. (Cl. 254—193)

This invention relates to improvements in snatch blocks and more particularly to snatch blocks that are readily inserted onto or removed from a looped line.

When wire cables or ropes are used for pulling objects by power means, as for instance in the drilling of oil wells, it is often desirable to insert an attachable block onto the line without the necessity of threading the rope or cable onto the block. Such blocks are insertable on or removable from a line and are generally referred to as snatch blocks. While these blocks are in wide usage, they vary somewhat in the manner in which they are attached to or removed from a line, some utilize bolts to bolt the block together after the line is inserted thereinto, which requires considerable time and accessory tools, others use various types of linkages, and while such arrangements allow the snatch block to be inserted onto or removed from the line rapidly, there is the problem of their becoming opened while a pull is being exerted on the line, thus presenting a hazard to the operations and to the workmen.

In the present snatch block, the line can be inserted or removed from either side thereof and when there is pull on the line there is no possibility of the block becoming opened and thus removed from the line.

An object of this invention is to provide an improved snatch which may be readily inserted transversely onto or which may be removed transversely from a looped line without the necessity of the removal and replacement of bolts and nuts, and yet provide a sturdy block that cannot become disconnected during cable pull thereon.

Another object of this invention is to provide a snatch block that is simple in construction, and which is easy and effective in operation.

Yet another object of the invention is to provide a snatch block that may be locked on the line and will not become accidentally detached therefrom when pull is exerted on the line.

With these objects in mind and others that will manifest themselves as the description proceeds, reference is to be had to the accompanying drawing of which there is one sheet, in which:

Fig. 1 is a front elevational view of the assembled snatch block;

Fig. 2 is a perspective view showing two sides thereof;

Fig. 3 is a fragmentary sectional view through the swivel member of the snatch block and the pivot block thereof;

Fig. 4 is a sectional view taken substantially on the line 4—4 of Fig. 3; looking in the direction indicated by the arrows;

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 3, looking in the direction indicated by the arrows;

Fig. 6 is a side elevational view of the snatch block in position to receive a cable or rope; and

Fig. 7 is a sectional view taken on the line 7—7 of Fig. 6, looking in the direction indicated by the arrows.

With more detailed reference to the drawing, the numerals 11 and 12 designate side plate members which members are substantially identical except that plate member 12 is indicated as having a bar 14 attached, by means of screws 16, within a notch formed in a side thereof. Each of the side plate members are complementarily apertured at one end to receive a pin 18 about which the side plate members 11 and 12 pivot, and also on which a sheave 20 is journaled. The opposite ends of the respective side plate members 11 and 12 have a peripheral portion 22 and 24 surrounding the respective outstanding pockets 26 and 28 formed in the respective side plate members 11 and 12, to form a pin receiving notch, as will be more fully explained hereinafter.

Outstanding ribs 34 and 36 on the respective side plate members 11 and 12 form abutments for the swivel block member, which is generally designated at 38, when this swivel block moves to either side of the plates.

The pockets 26 and 28 each have a longitudinal groove 40 therein that connects notches 30 and 32 in the respective side plate members 11 and 12 so as to enable the insertion of the pivot pin 42 of swivel block 38. The pin 42 is an integral part of the swivel block 38 and the respective ends thereof are held within the notches 30 and 32 in the respective side plate members so as to pivot the swivel block therein.

The swivel block 38 has lugs 44 and 46 on transversely opposite sides thereof that extend outwardly and downwardly to engage the respective peripheral flanges 22 and 24 of the side plates 11 and 12. The lower end of each of these lugs 44—46 has sufficient clearance to admit the swivel block 38 to be moved downward along the peripheral flange 22 until one end of the pin 42 passes out through notch 30. However, the opposite plate, as illustrated in Fig. 6, is in such position as to permit the block 38 to rest with the swivel hook 48 extending outward from a transverse side of plate member 12. The hook 48 has a stem 50 that is reduced in size, as shown at 52, and which stem has an enlarged end portion 54 that is interfitted within recess 56 that is formed in the swivel block 38 so as to prevent longitudinal movement of the stem 50.

A block 58 is fitted within a recess formed within a side of swivel block 38 and is welded therein as indicated at W, in Figs. 4 and 5, so as to prevent lateral movement of the stem 50 but at the same time permit free swiveling action of the stem within recess 56.

Operation

The side plate members 11 and 12 are assembled on pivot pin 18, with a sheave 20 positioned therebetween and journaled on the pivot pin 18. The pin 18 is upset at each end to prevent lateral movement of the plates 11 and 12, yet permit free pivotal movement for the assembly and operation of the snatch block. One end of the pin 42, which pin is preferably made integral with swivel block 38, may be inserted through notch 32 when the bar 14 is removed. After the pin 42 is inserted into the notch and thence into slot 40, the hook of the swivel block 38 is moved upward and then pivoted about pivot pin 42 and moves downward into the position as shown in Fig. 6. The bar 14 is then secured in place by means of screws 16. This bar 14 acts as a safety stop to prevent the pin 42 from becoming accidentally disconnected from the side plate 12.

With the hook in position is shown in Fig. 6, the side

plate member when moved longitudinally of said longitudinal groove to another position, and anchor means connected to said block.

6. The device substantially as set forth in claim 1, wherein: said anchor means is a bar having a head portion and a neck portion, said block has a shouldered groove formed longitudinally in a side thereof, the inner end portion of said groove being relatively wide to receive the head of said anchor bar means, and the outer portion of said groove being of lesser width and adapted to receive the neck portion of said anchor bar means, and a

wedge block adapted to complementarily fit within said longitudinal shouldered groove to be welded in place so as to swivelably retain said anchor bar means within said block.

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