

(No Model.)

G. S. FOUTS.
GRIP BLOCK.

No. 523,273.

Patented July 17, 1894.

Fig. 1.

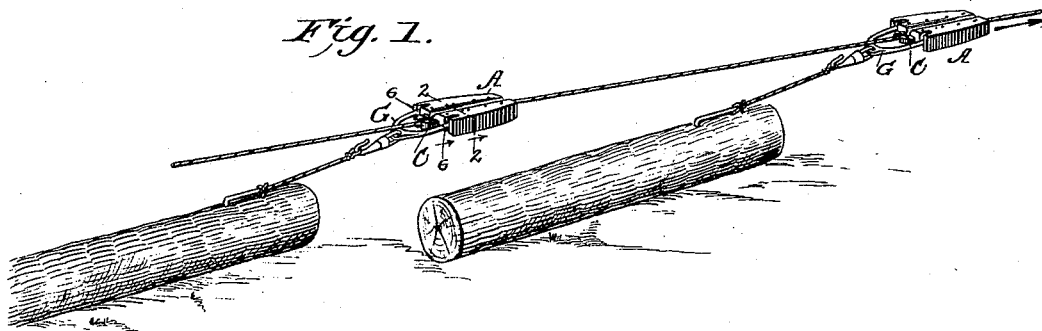


Fig. 2.

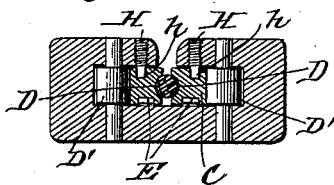


Fig. 6.

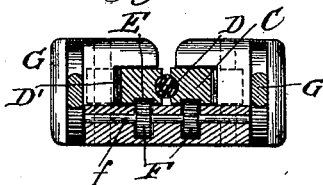


Fig. 3.

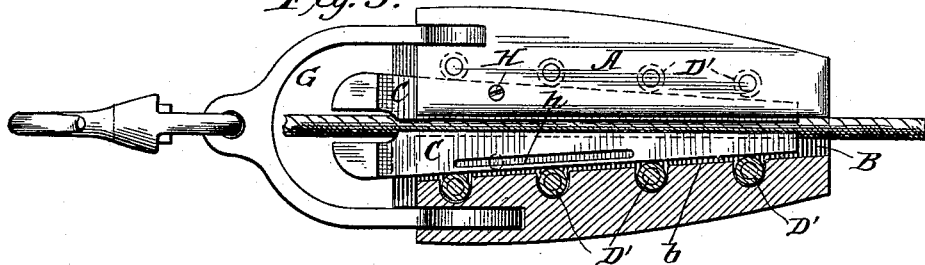


Fig. 4.

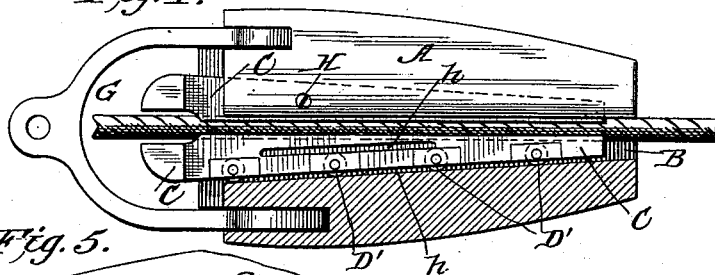
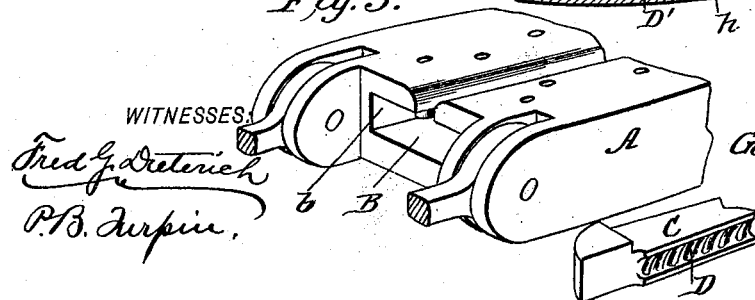


Fig. 5.



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GRIP-BLOCK.

SPECIFICATION forming part of Letters Patent No. 523,273, dated July 17, 1894.

Application filed June 21, 1893. Serial No. 478,408. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. FOUTS, of Aberdeen, in the county of Chehalis and State of Washington, have invented a new and
5 useful Improvement in Grip-Blocks, of which the following is a specification.

My invention is an improvement in grip blocks and consists in the special constructions and combinations of parts as will be
10 hereinafter described and pointed out in the claims.

In the drawings—Figure 1 is a perspective view of my grip block as in use. Fig. 2 is a cross section thereof on about line 2—2 of
15 Fig. 1. Fig. 3 is a top plan view partly broken away in section. Fig. 4 is a similar view illustrating a somewhat modified arrangement of the rollers. Fig. 5 illustrates a different construction for the connection of the clevis,
20 and Fig. 6 is a cross section on line 6—6 of Fig. 1.

The block or body A which may be of metal or other suitable material is preferably tapered toward one end to avoid engaging
25 obstructions when it moves said end forward. This block is mortised or recessed longitudinally to receive the cable and keys such recess B having its walls *b* converging toward one end producing a tapered or wedge shaped
30 recess undercut at its sides to form seats for the keys C. These keys C of which I employ two are fitted in the recess B and are adapted at their inner adjacent faces to bind upon the cable being to such end preferably
35 grooved longitudinally at D and having such grooves corrugated transversely or otherwise roughened to better engage the cable but manifestly such faces may be left smooth if preferred. Anti friction rollers are provided
40 between said keys and the tapered or converging walls of the recess B. In the construction shown in Figs. 1 and 2 this is effected by means of rollers D' journaled to the body A and projecting at their peripher-
45 ies slightly into the recess B, while in Fig. 4 the rollers are shown as journaled to the keys. These interposed rollers are quite important as they avoid any binding of the keys in the blocks and permit said keys to
50 adjust easily into and out of clamped position

so they will affect such adjustment in an automatic manner as the movement of the cable forward will readily set the keys. To cause said keys to move together it is preferred to provide them with racks E and to provide
55 pinions F meshing said racks and fixed upon a shaft *f* so that the keys are certain to move back and forth together.

The clevis G is connected pivotally with the block. This may be accomplished in the
60 manner shown in Fig. 1 or, if desired lugs may be projected from the end of the block to form seats for the bail or clevis, as shown in Fig. 5.

The manner of using the improved grip
65 block will be understood from Fig. 1. It will be seen that it can be conveniently applied to and removed from the cable at any point and that when so applied it will be clamped by its keys firmly to the cable. This cable may
70 be driven by any suitable power. Where single logs or the like are to be dragged by mule or horse power the block may be reversed, the horse or mule being hitched to the clevis and the log or other object to the cable
75 held by and between the clamping keys.

To prevent the keys becoming lost I may in some instances provide pins or screws H projecting from the body A into grooves *h* in
80 the keys.

It is manifest that the grip block will operate as well on a rod or chain as on a cable; also that it may be used in drawing bridge rods and the like together as well as in hauling.

Having thus described my invention, what
85 I claim as new, and desire to secure by Letters Patent, is—

1. In a grip block the combination with the body or main portion and the keys having racks, of the pinions meshing said racks and
90 the connections between said pinions whereby they are locked to turn together all substantially as set forth.

2. A grip block having a recess provided with converging walls, keys fitted in said
95 recess and having racks, roller bearings between said keys and converging walls, and pinions each meshing one of the racks of the keys and connected to turn together all
100 substantially as and for the purposes set forth.

3. The improved grip block herein described consisting of the body or main portion having the recess, the walls whereof converge and are undercut as described and having
5 ing rollers projecting beyond the face of said walls the keys fitted in said recess and provided with racks and the connected pinions

meshing said racks whereby they are caused to move together all substantially as and for the purposes set forth.

GEORGE S. FOUTS.

Witnesses:

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JOHN S. GUNN.