(No Model.)

W. SMITH.

COMBINED SNATCH BLOCK AND HITCHING DEVICE.

No. 550,140. Patented Nov. 19, 1895.

Fig. 1.

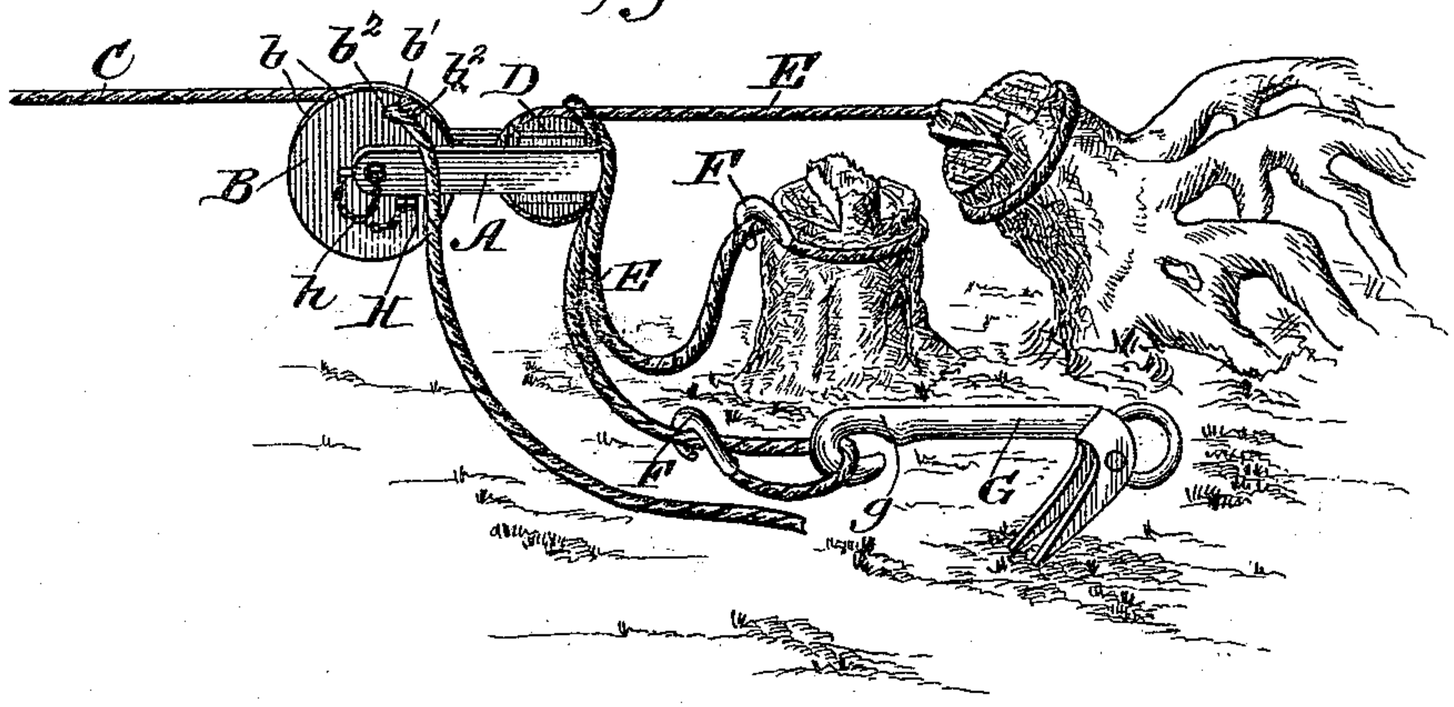


Fig. 2.

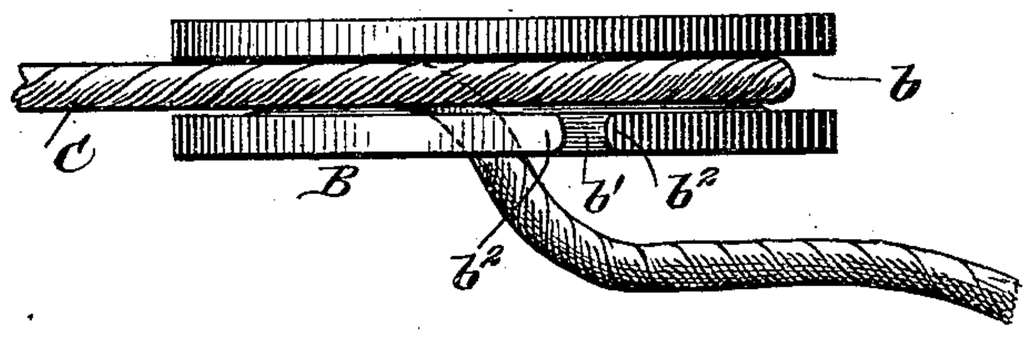
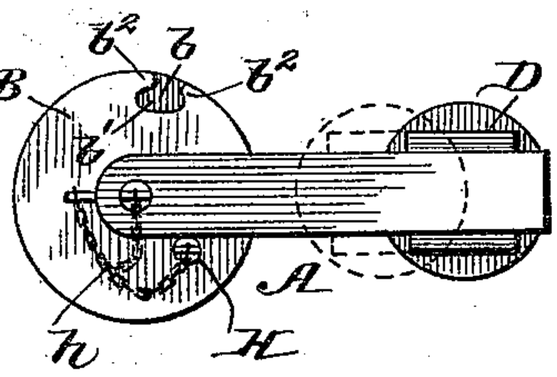


Fig. 3.



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WILLIAM SMITH, OF MYSTIC, IOWA.

COMBINED SNATCH-BLOCK AND HITCHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 550,140, dated November 19, 1895.

Application filed May 9, 1894. Serial No. 510,639. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SMITH, a citizen of the United States, residing at Mystic, in the county of Appanoose, State of Iowa, have invented certain new and useful Improvements in a Combined Snatch-Block and Hitching Device; 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 appertains to make and use the same.

This invention is an improved combination snatch-block and hitching device and relates particularly to certain improvements upon my Patent No. 509,774, granted November 28, 1893, the object of the present invention being to provide a device that can be quickly and easily moved back and forth upon the pulley-rope, enabling the operator to connect any number of hitching-ropes at one time.

Another object is to construct a sheave in which the rope can be locked without damage to said rope, and other objects are to provide an improved form of rope-hooks and a novel construction of root-hooks.

With these various objects in view my invention consists in the peculiar construction of the various parts and their novel combination or arrangement, all of which will be fully described hereinafter, and then pointed out in the claim.

In the drawings, Figure 1 is a view illustrating the application of my improved device. Fig. 2 is an edge of the sheave, and Fig. 3 is a detail side view of the sheave and clevis and sliding block.

In carrying out my invention I employ a clevis A open at one end, and at said open end is journaled a sheave B, having a deep round groove *b*, twice the depth of the rope and of a width to snugly receive said rope. In one side a groove *b'* extends from the main groove obliquely out through the side of the sheave, and projecting inward over said side groove are the projections b^2, which prevent the rope slipping, as more fully explained hereinafter. Passing around this sheave B is a pulley-rope C. In the closed end of the clevis is arranged a sliding block D, which holds the hitching-ropes E E, and at the end of each hitching-rope E is secured a rope-hook F, said hooks being securely connected to the rope by providing a recess *f* at the end of the bore through which the rope passes, unraveling the ends of the rope and then filling the said end with lead or other suitable metal, as clearly shown in Fig. 2. G indicates my improved root-hook having a hook *g* at one end to receive the hitching-rope and at its opposite end is provided with the prongs, as shown, to prevent slipping.

The sheave B can be placed anywhere on the pulley-rope and can be quickly moved back and forth, enabling the operator to connect any number of hitching-ropes at the same time to pull a close growth of small timbers, where a number of stumps can be pulled at one time and the power can at any time be doubled by pulling the rope out over the sheave, as shown in Fig. 5. The groove in the sheave being twice the depth of the rope obviates the necessity of a casing to hold the rope in the grooves, and being round in form preserves the rope in perfect form during a heavy pull.

Where my snatch-block is used as a rope-coupler and hitching device the sheave is locked from revolving by a bolt or pin H, which passes through the clevis A and through the body of the sheave. The bolts or pins H are attached to the clevis by a chain *h* and are formed with a spring-key *h'*, which prevents the bolt being disengaged. The pull-rope is drawn up around the sheave and out through the side groove and held firmly down in the groove by the projections at the side thereof. If the rope was not held down firmly in the groove by the projections over the rope, then the spring of the steel rope would cause it to straighten up out of the side groove and would not form a wedge in the groove to hold the rope on the sheave when the rope has thus been placed around the sheave and passing itself at the point when the rope goes out through the side of sheave, the two grooves being a perfect fit for the ropes side by side at this point, in form are wedge-shape, and the two ropes pulling side by side form a wedge out into the side groove, holding the rope firmly in said side groove, and owing to the perfect form of the groove in the sheave the rope cannot possibly receive any injury, as it does in a V-shaped groove.

Each hitching-rope is attached by a hitch around the sliding block, said block pressing

the rope firmly against the back of clevis, holding the ropes so that they cannot slip. The hooks attached in the manner described are securely held to said rope and this attachment can be quickly and easily made and it can be done in the field as well as in a shop, the only thing needed being a small quantity of melted lead or Babbitt metal.

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

In a stump extractor, the combination, with a clevis A, closed at one end, of the sheave B journaled in the open end of the same, said sheave having a deep, wide groove b, and an opening b' in the side, providing projections b^2, the pulley rope C passing around the sheave, out through the opening, and beneath one of the projections, the sliding block D, arranged to slide between the sheave B and the closed end of the clevis, the hitching ropes E, passed around the block D within the clevis; said ropes carrying hooks F at their ends, all of said parts being constructed and arranged, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM SMITH.

Witnesses:
GEO. R. SMITH,
FRANK R. SMITH.