No. 753,233. PATENTED MAR. 1, 1904.

J. CARNEY.

ROPE GRAB.

APPLICATION FILED FEB. 26, 1903.

NO MODEL.

Fig. 1.

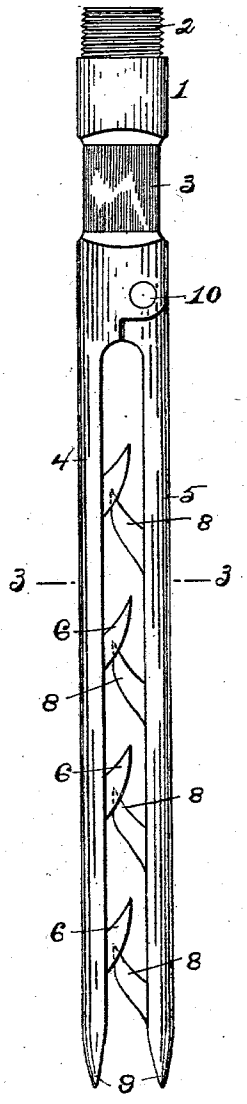

Fig. 2.

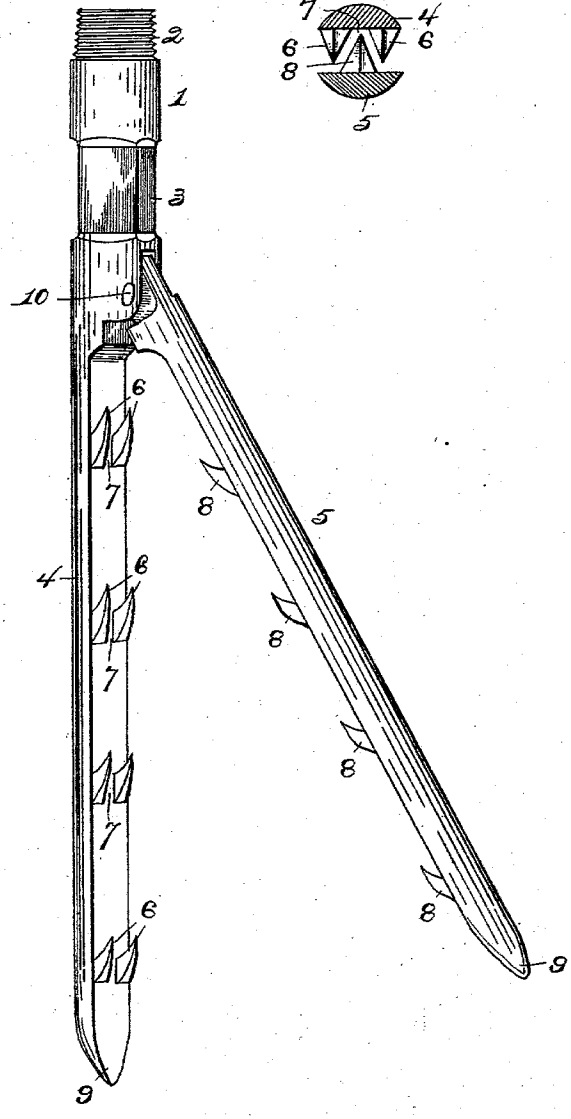

Fig. 3.

WITNESSES:

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No. 753,233. Patented March 1, 1904.

UNITED STATES PATENT OFFICE.

JOHN CARNEY, OF SALEM, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO MATTHEW McDERMOTT, OF MARTINS FERRY, OHIO.

ROPE-GRAB.

SPECIFICATION forming part of Letters Patent No. 753,233, dated March 1, 1904.

Application filed February 26, 1903. Serial No. 145,120½. (No model.)

To all whom it may concern:

Be it known that I, JOHN CARNEY, a citizen of the United States of America, and a resident of Salem, county of Harrison, and State of West Virginia, have invented certain new and useful Improvements in Rope-Grabs, of which the following is a specification.

My invention relates to new and useful improvements in rope-grabs, and more particularly to an improved fishing-tool for oil and other wells; and it consists in the particular construction, arrangement, and combination of parts, which will hereinafter be fully described, and specifically pointed out in the claims hereto appended.

The object of my invention is to provide a simple, cheap, and efficient tool for automatically grappling a broken or parted rope or cable attached to well-drilling tools, and particularly for grappling wire ropes or cables.

A further object of the invention is to provide a tool of the character mentioned which will securely hold the rope or cable and not admit of accidental disengagement when it has once been grappled.

As is well-known, it is extremely difficult with the ordinary tools in use to secure such a hold upon a wire rope or cable as will admit of its being drawn from the well, for the reason that the teeth or prongs used are not arranged so that a perfect grip is secured—that is, said teeth or prongs do not interlock in such a manner as to secure a firm grip upon a wire rope or cable. In my invention the teeth or prongs are arranged so that they substantially interlock, and the liability of a rope or cable becoming disengaged when once grappled is therefore reduced to a minimum. Furthermore, with my invention the greater the weight to be borne the less is the liability of disengagement or slipping.

In describing my invention in detail reference is herein had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of my invention. Fig. 2 is a perspective view of the same, showing the jaws separated or opened; and Fig. 3 is a cross-section on the line 3 3, Fig. 1.

Referring to said drawings, in which like reference-numerals designate like parts throughout the several views, 1 indicates a head having a screw-threaded end 2, whereby it is secured to a stem and provided with an angular wrench-engaging portion 3. 4 is a long and slender fixed jaw carried by said head. Hinged or pivoted, as shown, opposite the fixed jaw 4 is a relatively movable jaw 5, similar in construction to the jaw 4. The outer faces of said jaws are preferably convex in form, so that when said jaws are closed, as shown in Fig. 1, a substantially cylindrical body is formed, the same being adapted for use in a tube of small gage without hindrance. The inner or adjacent faces of said jaws are preferably flat, as shown.

Carried by the inner face of the fixed jaw 4 is a series of upwardly-projecting pointed teeth or prongs 6, which are arranged in pairs, with a small space 7 intervening, and on the inner face of the movable jaw 5 is a series of upwardly-projecting pointed teeth or prongs 8, which are arranged singly and are located centrally with reference to the edges of said face. Said teeth or prongs 8 are so distanced with relation to the teeth or prongs 6 that the point of each lies in the space 7, directly between the bases of said teeth 6, forming what may be termed "interlocking wickers" for grasping and securely holding a rope or cable which may be engaged thereby.

While being lowered into a well the jaws hang in substantially the position shown in Fig. 1. When the tapered points 9 of said jaws come in contact with the rope or cable to be grappled, the movable jaw 5, which works freely on its hinge 10, is easily deflected or raised from its normal vertical position, allowing space for said rope or cable between the jaws. Upon lifting the device the teeth firmly engage the said rope or cable.

It is obvious that various slight changes may be made in the construction and arrangement of the parts composing my invention without departing from the general spirit and scope thereof. Hence I do not wish to limit myself to the precise construction and arrangement herein shown and described.

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

1. A well-fishing tool comprising a fixed jaw, pointed upwardly-projecting teeth carried by said jaw, said teeth arranged in pairs with an intervening space, a movable jaw hinged in front of said fixed jaw, teeth carried by said movable jaw, the last-mentioned teeth arranged to come in the said intervening spaces, substantially as described.

2. In a tool of the character described, the combination of a fixed jaw, a relatively movable jaw hinged to normally stand directly in front of said fixed jaw, teeth arranged in pairs on one of said jaws, and teeth arranged singly on the opposite jaw, the last-mentioned teeth adapted for interlocking with the teeth forming the pairs on the opposite jaw, substantially as described.

3. A well-fishing tool consisting of a pair of pointed jaws having convex outer faces, one of said jaws being relatively fixed and the other hinged and relatively movable, a plurality of teeth arranged in pairs carried by the fixed jaw, and a plurality of teeth carried by the movable jaw and arranged to interlock with the pairs of teeth on the opposite jaw, substantially as described.

4. A well-fishing tool comprising two similarly-formed jaws, one of said jaws being relatively fixed and the other relatively movable, said movable jaw hinged to operate directly in front of the fixed jaw, teeth arranged singly on said movable jaw, and teeth on the fixed jaw arranged in pairs adapted to straddle the points of the teeth on the movable jaw, substantially as and for the purposes set forth and described.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

JOHN CARNEY.

Witnesses:
MILLARD F. SNIDER,
MADGE CATHER.