

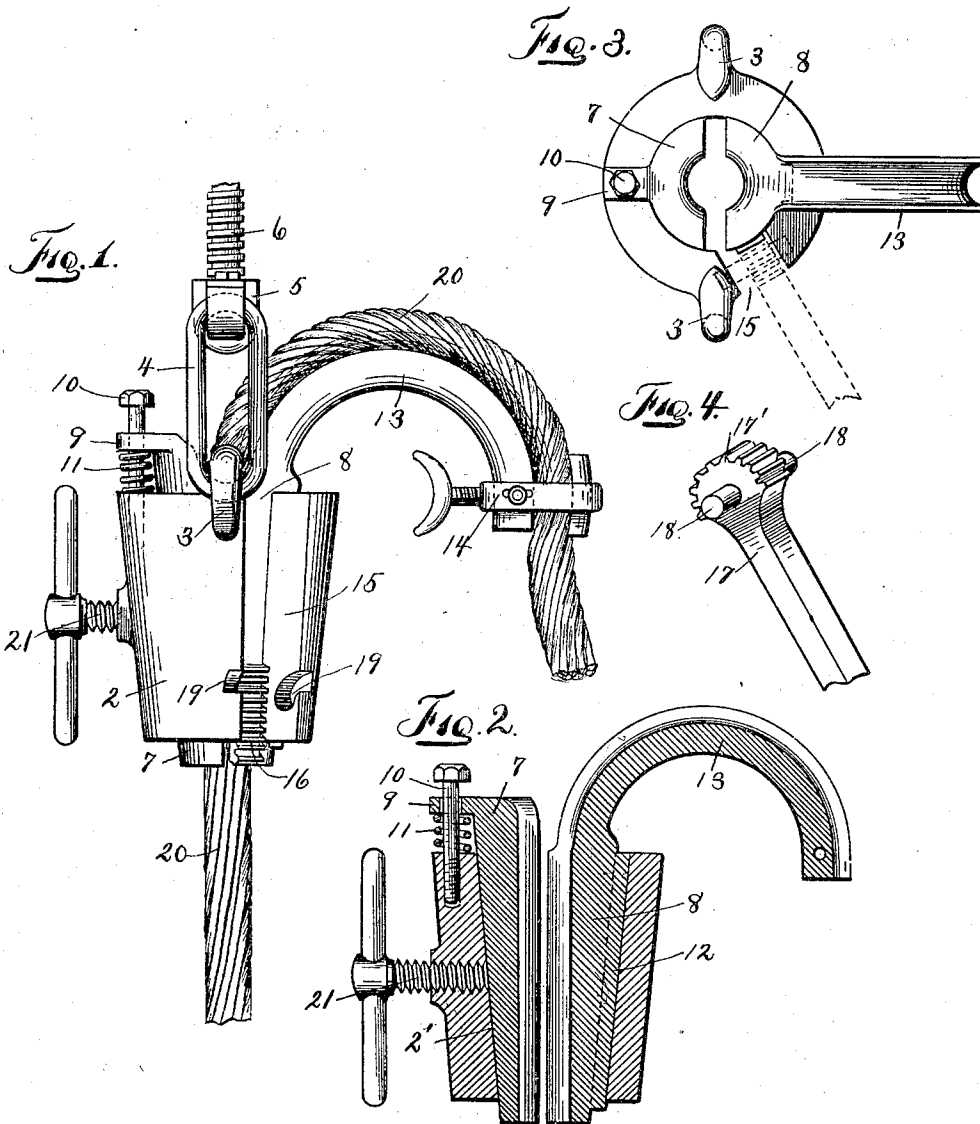
No. 696,748.

C. F. RIGBY.
ROPE CLAMP.

Patented Apr. 1, 1902.

(Application filed May 20, 1901.)

(No Model.)



WITNESSES.

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CLARK F. RIGBY, OF NEW MARTINSVILLE, WEST VIRGINIA.

ROPE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 696,748, dated April 1, 1902.

Application filed May 20, 1901. Serial No. 61,114. (No model.)

To all whom it may concern:

Be it known that I, CLARK F. RIGBY, a citizen of the United States, residing at New Martinsville, in the county of Wetzel and State of West Virginia, have invented certain new and useful Improvements in Rope-Clamps, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to clamps for well-drilling cables, and has particular reference to certain improvements upon the clamps patented to me January 2, 1900, No. 640,416. The clamp of that patent was designed with special reference to use on wire cables. In the present improvement the clamp may be used on either wire or Manila cables. To secure the greatest efficiency, I have found it desirable to change the location of the rope-inserting passage, and I have also provided means for loosening the hold of the slips upon the cable. Also in the present improvement I form the clamp-head with integral link-attaching hooks.

The invention therefore resides in these and other features of construction and combination of parts, hereinafter fully described and claimed, and illustrated by the accompanying drawings, wherein—

Figure 1 is an elevation of a rope-clamp embodying my improvements. Fig. 2 is a vertically sectional view of the same. Fig. 3 is a plan view. Fig. 4 is a detail view of the slip-loosening wrench.

Referring to the drawings, the upper portion of clamp-head 2 is formed with the integral hook projections 3, adapted to receive links 4, depending from swivel-bar 5 of temper-screw 6. The bore 2' of head 2 is downwardly tapered, and operative therein are the curved and externally-tapered slips 7 and 8, which are positioned opposite each other and at right angles to hooks 3. Projecting outwardly from slip 7 is the apertured ear 9, which is movable vertically on pin 10, projecting from head 2, with spring 11, arranged on the pin beneath the ear for holding said slip normally raised. On the rear side of slip 8 is tongue 12, which fits a corresponding recess in bore 2' of the head, whereby said slip is prevented from turning within the head. Projecting outward from the upper

portion of slip 8 is the curved rope-guide 13, carrying at its outer end the temporary clamp 14.

In the present improvement the cable-inserting passage 15 is arranged adjacent one of the head-supporting hooks 3, instead of directly behind the guide-carrying slip, as in my patent above referred to, for the reason that the passage must be sufficiently large to admit either a Manila or wire cable, and a passage of this width directly behind the said slip would greatly reduce its bearing-surface and weaken the structure. The portion of slip 8 overhanging passage 15 is provided with teeth 16 to form a rack which is adapted to be operated upon by the toothed wrench 17 for the purpose of raising and loosening the slip when it is desired to remove or readjust the clamp. Projecting from opposite sides of the curved and toothed head 17' of the wrench are trunnions 18, adapted to bear in depressions 19 in opposite faces of passage 15, when the wrench is being operated, as above described, as shown in dotted lines in Fig. 3. The wrench may thus be instantly applied, and when not in use is entirely removed from the clamp. A wire cable 20 is here illustrated in connection with the clamp, together with slips especially adapted therefor. For securing a Manila cable which is of greater diameter than the wire cable, the slips employed are of the same construction as those here shown, excepting that the rope-receiving recesses on their adjacent faces are correspondingly larger.

Slip 8 is removed to admit the cable through passage 15 and is again immediately inserted, and the large screw 21, extending through head 2, is set to tightly clamp the slips and cable. The cable is then adjusted over guide 13 and secured by clamp 14, and this being accomplished set-screw 21 is retracted, permitting the weight of the tools and cable 20 to draw the slips down in head 2, and thus automatically clamp the cable. To remove or readjust the clamp, the temporary clamp 14 is removed from guide 13, and the slack in the cable is taken up on the bull-wheel, thus relieving the temper-screw and the clamp of the weight of the cable and tools. The lever-wrench 17 is then applied to loosen slip 8, when the clamp may be readily

disengaged from the cable. In this, as in my former improvement, the weight of the cable and tools is borne by the clamp-head, which has direct swivel connection with the temper-screw. The slips are thus relieved of the suspended weight to which they have been generally subjected, owing to their suspension from the temper-screw in clamps generally used prior to my improvements.

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

1. The combination of a clamp-head formed with a vertical cable-inserting passage leading to its downwardly-tapering bore, downwardly-tapering cable-securing mechanism operative within the tapering bore, and means operative within the cable-inserting passage for raising the cable-securing mechanism, substantially as shown and described.

2. A clamp for well-drilling cables comprising a head having a vertical bore and a lateral slot leading to the bore, vertically-movable cable-clamping mechanism operative within the head-bore, a device operative through the head-slot for moving vertically said clamping mechanism, and means for operatively mounting said device on the said head, substantially as shown and described.

30 3. The combination of a clamp-head having a downwardly-tapering bore and formed with a vertical cable-inserting passage, downwardly-tapering cable-securing mechanism operative within the tapering bore, and a lift-

ing device removably positioned within the cable-inserting passage and formed to interlock with the cable-securing mechanism, substantially as shown and described.

4. The combination of a clamp-head, cable-securing slips operative therein, one of said slips being formed with a wrench-hold, and a lever-wrench adapted to be fulcrumed to the head and operatively engage said slip for loosening it, substantially as shown and described.

5. The combination of a clamp-head formed with a cable-inserting passage, cable-securing slips operative within the head, one of said slips overhanging said passage and toothed to form a rack, the opposite faces of the cable-passage being formed with bearing-points, and a lever-wrench adapted to bear therein and operatively engage the rack-slip, substantially as shown and described.

6. The combination of a clamp-head formed with a cable-inserting passage, cable-securing slips operative within the head, one of said slips overhanging said passage, and means operative in said passage for loosening said overhanging slip, substantially as shown and described.

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

CLARK F. RIGBY.

Witnesses:

B. E. RIGBY,
EMMETT RIGBY.