J. L. SMITH & J. McCAMBRIDGE.

ROPE CLAMP.

APPLICATION FILED AUG. 25, 1900. NO MODEL. Fig. 2.

United States Patent Office.

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ROPE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 725,599, dated April 14, 1903.

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To all whom it may concern:

Be it known that we, JESSE L. SMITH and JOHN MCCAMBRIDGE, citizens of the United States, residing at Lima, in the county of Al-5 len and State of Ohio, have invented a new and useful Rope-Clamp, of which the follow-

ing is a specification.

Our invention relates to rope-clamps for oil-well-drilling machinery; and it has for its 10 object to produce a device of this class which will be simple, strong, and very efficient; and it consists in the improved construction and novel arrangements of parts of the same, as will be hereinafter more fully set forth.

In the accompanying drawings, in which the same reference-numerals indicate corresponding parts in each of the views in which they occur, Figure 1 is a perspective view of our improved clamp in position for use. Fig. 20 2 is a sectional view taken longitudinally of the rope-seat. Fig. 3 is a sectional view of the same longitudinally of the jaws. Fig. 4 is an elevation of the inner face of one of the jaws with the rope-seat spirally grooved; and 25 Fig. 5 is a plan view of the same, showing the use of a cam-lever instead of a set-screw

and the rope-seat smooth.

In constructing our improved clamp we hinge the jaws 1 and 2 together at one end in 30 the usual manner, as shown at 3, and detachably secure them together at the opposite ends by means of the yoke 4 and set-screw 5. The screw 5 is provided with a head 5°, adapted when the jaws are clamped together 35 to seat in a recess 5^b, formed in the outer face of the jaw near the free end thereof. The upper ends of the projections 6, forming the rope-seat, are inclined toward each other and each provided with an eye 7, within which 40 the usual supporting-rings 8 (shown only in dotted lines) are secured in the ordinary manner. The outer faces of the two members comprising the clamp are each provided with ribs 9 and 10, which extend longitudinally of 45 the jaws and of the rope-seats, respectively. The inner faces of the jaws are each provided with ribs 11, which extend from the rope-seat to the ends of the jaws. The rope-seats are preferably formed smooth for engaging with 50 the rope 12, or they may be provided with transverse or spiral grooves 13 for engaging with the strands of the rope; but we prefer

to form the seats smooth, with the upper ends flared outward, so that we can use them with or without a wrapper 14, as shown in dotted 55 lines in Fig. 2.

Instead of the set-screw a cam-lever 17 may be pivotally secured in the free end of the yoke for engaging with one of the jaws and forcing it toward the other one. The hinge 60 between the two jaws is preferably formed from several alternately-arranged leaves to secure the necessary strength and also to cause the rope-seats to stand as near parallel with each other as possible when the clamp 65 is closed for the purpose of clamping the rope

tightly between them.

In using our improved clamp the rope is inserted into the slips or seats with or without the wrapper and the free ends of the jaws 70 brought together, and the yoke, which is pivotally secured to the outer end of one of the jaws, is swung over the outer end of the other jaw, and the set-screw or lever, as the case may be, is operated to force the jaws to- 75 ward each other and firmly clasp the rope between them. The clamp is then connected with the temper-screw in the usual manner and the drill operated. When it is desired to take a new bite upon the rope, the clamps 80 are released and opened and the rope slipped through the jaws the required distance, when the jaws are again brought together and the rope clamped, as above described. If the wrapper is used, it is put around the rope, 85 with the main portion above the jaws substantially wedge-shaped, so that it can be slipped down between the flaring portions of the jaws and will engage with the rope-seats and prevent its further passage. When the 90 wrapper is not used, the rope is clamped by the lower portions of the rope-seats, which are either smooth or ribbed, as desired.

Having thus fully described our invention, what we claim as new, and desire to secure 95

by Letters Patent, is—

In a rope-clamp, a pair of horizontallyextending clamping members each of which has its inner and outer face provided with an integral rib projecting laterally therefrom 100 and extending in a horizontal manner, each of said members having its inner face provided with a semicylindrical groove, each of said members having a semicylindrical ex2 725,599

tension formed integral with the top thereof, the inner face of the extension registering with the groove of its respective member, each of said members provided with an in-5 tegral semicylindrical projection depending from the bottom thereof, the inner face of the projections registering with the inner face of the groove of its respective member, each of said members further provided with 10 a curvilinear projection, said curvilinear projection of each member formed integral with the semicylindrical extension thereof and with the ribon the outer face of its respective member and terminating at its top into a 15 hook, each of said members further provided with a vertically-extending rib formed integral therewith and with the laterally-projecting rib on the outer face of its respective member and one of said members having its

outer face provided with a recess, in combi- 20 nation with means extending through one end of each of the members for pivotally connecting the members together, a yoke surrounding the free end of each of said members, means for pivotally connecting one 25 end of the yoke to one of said members, a clamping-screw extending through said yoke and provided with a head adapted to engage in the recess formed in one of said members, said screw when set adapted to clamp the 30 said members together, and a handle connected to the outer end of said screw.

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Witnesses:

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