my invention relates to improvements in polish rod grips for use more particularly in handling the polish rods of oil well pumps.

The principal object of the invention is to provide a simply constructed, efficient device of this character which is adapted to securely grip a polish rod and suspend the same at the mouth of the well and to increase the grip thereon under the weight of the rod.

Another object is to provide a polish rod grip for the purpose above set forth which is designed for heavy duty, ease of operation, and low cost in manufacture.

Other and subordinate objects are also comprehended by my invention, all of which together with the precise nature of my improvements will be readily understood when the succeeding description and claims are read with reference to the drawing accompanying and forming a part of this specification.

In said drawing:

Figure 1 is a view in side elevation of a preferred embodiment of my invention,

Figure 2 is a view in top plan,

Figure 3 is a view in vertical section taken on the line 3—3 of Figure 2 looking in the direction indicated by the arrows.

Referring to the drawing by numerals, the illustrated embodiment of my invention comprises a block-like head 1 of rectangular edge contour adapted to be applied in up-ended position and having a front, laterally curving flange forming a fixed jaw 2 of hook-like form in cross section for spanning a polish rod, not shown, and gripping one side thereof. The head 1 increases in thickness from its rear side for reinforcing purposes. A movable bar-like jaw 3 is slidably mounted in the head 1 in the rear of the fixed jaw 2, opposite the latter, for endwise movement in the plane of said head and diagonally of the fixed jaw 2 whereby said movable jaw is adjustable toward and from the fixed jaw to grip and release the opposite side of said rod.

The movable jaw 3 has a body portion 4 substantially square transversely, which is slidable in a similarly shaped guideway 5 provided in the head 1 in the plane thereof and opening toward the fixed jaw 2, said guideway extending from end to end of the head and inclining downwardly toward the fixed jaw 2 whereby the movable jaw 3 is cammed by said guideway toward and from the fixed jaw 2 under movement of the body portion 4 downwardly and upwardly, respectively. The body portion 4 has a front, longitudinally extending rib 6 projecting out of the guideway 5 opposite the fixed jaw 2, said rib having a transversely arcuate gripping front face 7 parallel with the inner face of the fixed jaw 2 for engagement with the rod to clamp the latter between the same and said fixed jaw. Teeth 8 are provided on the rear side of the body portion 4 of reduced thickness, said teeth being centered on said face and projecting into a vertical clearance groove 9 provided in the head 1 and opening into the guideway 5.

An operating lever 10 is provided for the movable jaw 3 detachably coupled to a toothed segment 11, the segment being pivoted, as at 12, in the head 1 in mesh with the teeth 8 and for operation in a recess 13 provided in said head. The coupling means between the lever 10 and segment 11 comprises an end socket 14 in said lever and a stud 15 extending from said segment.

The manner in which the described device is used and its operation will be understood from the foregoing. Suffice it to explain that the movable jaw 3 is elevated under downward operation of the lever 10 and through the medium of the segment 11 and teeth 8 and that under such elevation thereof the body portion 4 and guideway 5 coact to cam said jaw 3 away from the fixed jaw 2 for the introduction of a rod, not shown, between said jaws. To clamp the jaws 2, 3 against opposite sides of the rod, the lever 10 is moved upwardly to move the jaw 3 downwardly. Under downward movement of the jaw 3, the body portion 4 and guideway 5 coact to move the jaw 3 toward the jaw 2 and thereby clamp the rod between the same. The weight of the rod, in frictional engagement with the face 7 of the jaw 3, tends to urge said jaw 3 downwardly and tighten the clamping action of said jaws.

As will be understood, in the described operation of the device, the lower end of the head 1 is opposed to a fixed part of the well equipment in the usual manner, for instance, the usual walking beam, or the top end of the well tubing, not shown.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly the invention, as described, is susceptible of modification without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the subjoined claim.

What I claim is:

A polish rod grip comprising a head block of rectangular contour having a flat bottom end for
seating said head on a fixed part in up-ended position, said head having a laterally curved front edge flange extending throughout the height of the head and forming a fixed hook-shaped jaw for gripping the rod on one side thereof, said head being bifurcated in the rear of said fixed jaw to form a channel therein extending from end to end of said head and opening onto the inner face of said fixed jaw, said channel being provided in the opposite side walls thereof with a pair of countersunk guideways extending from top to bottom of the head and inclined downwardly toward said fixed jaw, an elongated movable jaw slidably fitted in said guideways for end-wise sliding movement vertically in said head in a path oblique to the inner face of the fixed jaw, whereby said movable jaw is operative in opposite directions toward and from said fixed jaw, said movable jaw having a reduced front edge opposed to said fixed jaw and provided with a rod gripping edge parallel with the inner face of the fixed jaw, and a toothed rack on the rear edge of said movable jaw, a toothed sector pivoted in said head in the rear of said rack for vertical rocking movement and meshing with said rack, said head being recessed in the rear edge thereof to accommodate said sector, and a hand lever extending from said sector out of said recess for manipulation to rock said sector.

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