

Title (en)
Handling device for drilling rods.

Title (de)
Vorrichtung zur Handhabung von Bohrgestängen.

Title (fr)
Dispositif de manutention de tiges de forage.

Publication
EP 0089599 A1 19830928 (FR)

Application
EP 83102529 A 19830315

Priority
FR 8204506 A 19820317

Abstract (en)
[origin: US4570706A] A device for handling rods for oil-well drilling, said device having a motor (21) associated with a reduction gear (22), the motor being suspended from a hook (8) and rotating a hollow vertical shaft (20) about its axis, said shaft being connected to a drilling sludge inlet pipe, wherein around said shaft is disposed a jack which has a cylinder (26) integral with the shaft and an annular piston (24) which is rotated with the shaft and which can undergo translation movements parallel to said axis, said piston (24) inside the cylinder (26) is extended outside the cylinder by a tubular end piece (33) which has a screw thread at its lower portion so as to be able to screw onto a drilling rod, the device further including a set of retractable claws (42) and a set of shoes (44) which allow the first set of rods to be both supported and held motionless, said set of claws and of shoes being guided so that they come into contact with guide units (41B, 43 B) which are prevented from rotating and are connected to a housing (35) which protects the assembly fixed at its upper portion to the assembly formed by the motor (21) and the reduction gear (22), said assembly being prevented from rotating by a connection system having a jack (9) and a connecting rod (100) which allow a sideways movement of the device as a whole and connect it to a carriage (10) which slides along stationary vertical tracks (11).

Abstract (fr)
Dispositif de manutention de tiges de forage comprenant, suspendu à un crochet un moteur associé à un réducteur et entraînant en rotation autour de son axe un arbre creux vertical (20) relié à une canalisation d'amenée de boues de forage, caractérisé en ce qu'est disposé autour dudit arbre un vérin comprenant un cylindre (26) solidaire de l'arbre et un piston annulaire (24) entraîné en rotation avec l'arbre et pouvant effectuer des mouvements de translation parallèles audit axe, ledit piston étant prolongé hors du cylindre par une pièce d'extrémité tubulaire filetée (33) à sa partie inférieure pour pouvoir se visser sur une tige de forage, le dispositif comprenant en outre, disposés dans le prolongement de la pièce d'extrémité, un jeu de griffes rétractables (42) et un jeu de patins (44) permettant respectivement de supporter et d'immobiliser en rotation le train de tiges, ce jeu de griffes et patins étant guidé contre des organes de guidage (41B, 43B) fixes en rotation et liés à un carter (35) de protection de l'ensemble fixé à sa partie supérieure à l'ensemble moteur 21 réducteur 22, lequel ensemble est immobilisé en rotation par un système de liaison à vérin (9) et bielle (100) permettant un déplacement latéral de l'ensemble du dispositif et le reliant à un chariot (10) coulissant le long de pistes verticales fixes (11).

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Citation (search report)
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• [A] US 3291225 A 19661213 - FORAN CHARLES D
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