

R. LABUDDE.
OIL WELL WALKING BEAM.
APPLICATION FILED MAY 21, 1912.

1,058,987.

Patented Apr. 15, 1913.

Fig. 1.

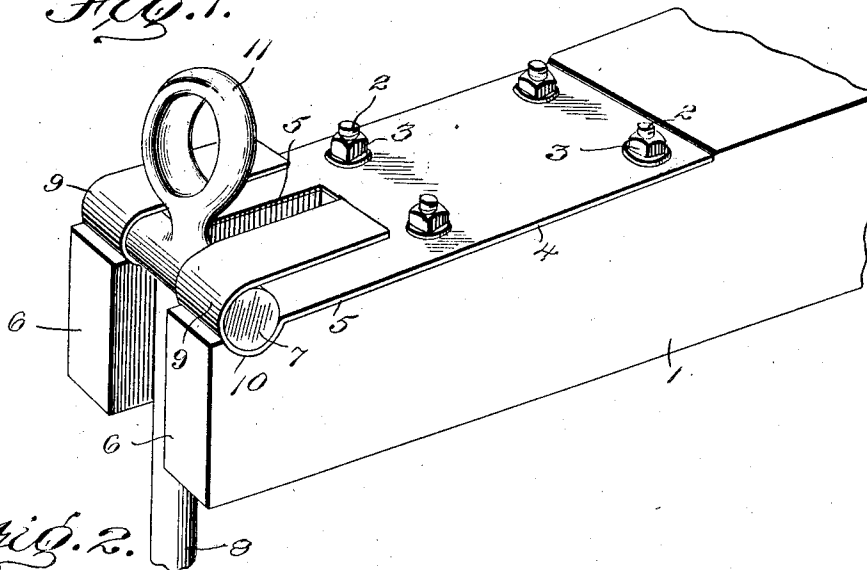


Fig. 2.

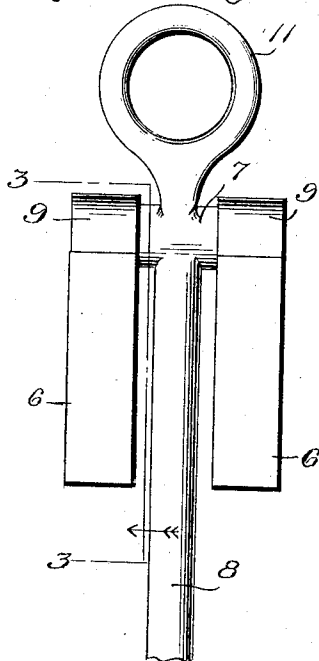
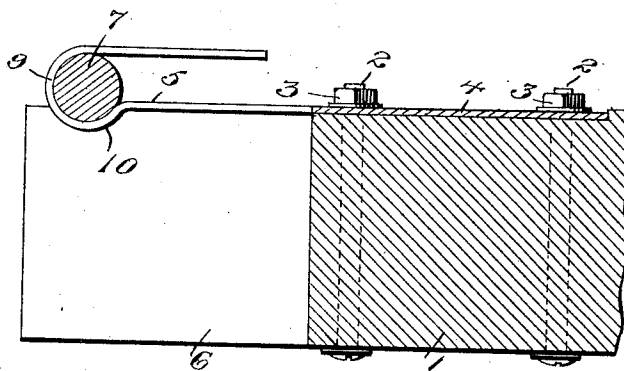


Fig. 3.



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Witnesses

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UNITED STATES PATENT OFFICE.

ROBERT LABUDDE, OF BAKERSFIELD, CALIFORNIA.

OIL-WELL WALKING-BEAM.

1,058,987.

Specification of Letters Patent.

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Application filed May 21, 1912. Serial No. 698,757.

To all whom it may concern:

Be it known that I, ROBERT LABUDDE, citizen of the United States, residing at Bakersfield, in the county of Kern and State of California, have invented certain new and useful Improvements in Oil-Well Walking-Beams, of which the following is a specification.

This invention relates to walking beams employed in operating oil wells, and has special reference to the connection between the walking beam and the grip pipe, the object of the invention being to provide a connection which will reduce the wear upon the end of the walking beam, and will prevent the grip pipe being accidentally released from the walking beam, while, at the same time, it may be very quickly and easily detached therefrom, when it is desired to pull the well or, for any other reason, it is necessary to detach the grip pipe from the beam.

The object of the invention is attained in such a structure as is illustrated in the accompanying drawings, and the invention consists in certain novel features which will be hereinafter first fully described and then more particularly pointed out in the appended claims.

In the drawings:—Figure 1 is a perspective view of the end of a walking beam and of a portion of the grip pipe showing the application of my invention; Fig. 2 is an end elevation of the walking beam and the grip pipe mounted thereon; Fig. 3 is a longitudinal section taken on the line 3—3 of Fig. 2, and looking in the direction indicated by the arrow.

The walking beam, 1, is of the usual construction and is mounted upon the usual saddle, not shown. Upon the upper side of the walking beam, I securely fasten, by bolts 2 and nuts 3, a connecting plate 4 which extends to the end of the beam and has its extremity slotted or forked, thereby providing branches 5 which lie directly over the branches 6 of the forked or bifurcated end of the beam. The connecting plate 4 is preferably resilient, and the forked extremities 5 are bent upon themselves to form bearings for the studs 7 constituting the T-head of the grip pipe 8, as shown. The free extremities of the forked ends of the connecting plate extend inwardly from the end of the beam, so as to project over the studs 7, as clearly shown, and thereby serve to hold the said studs in the bearings 9 formed

by the bight of the doubled-over portion of the connecting plate. It will also be noted that the plate fits closely to the top of the beam and the transverse notches or grooves 10 therein. The described formation of the plate and the bearings formed therein causes the plate to cushion the studs 7 of the grip pipe, so that they will not forcibly impinge upon the surfaces of the grooves or notches 10, and thereby tend to rapidly wear away the walking beam. The grip pipe is provided with the usual eye or ring 11, above the studs 7, which may be engaged by the hook on the end of the sand line, when it is desired to pull the well for any reason.

With the construction heretofore provided for connecting the grip pipe with the walking beam, it has been a very difficult and laborious matter to detach the grip pipe from the beam, when it was desired to pull the well, and in the operation of the pump the grip pipe would pound upon the beam and rapidly wear away the same. In my present device, when it is desired to disconnect the grip pipe from the beam to permit the well to be pulled, the operator ascends to the walking beam, as is the present custom, but, instead of being obliged to loosen a number of bolts and remove the adjuster board or other device, merely engages the hook on the sand line in the eye of the grip pipe and then exerts a slight pressure laterally upon the grip pipe, so that the studs 7 will be caused to ride rearwardly under the overhanging extremities of the connecting plate and clear the same. Of course, the reverse operation of engaging the studs under those overhanging extremities, and moving them into the depressions or bearings of the connecting plate, is equally simple.

The resiliency of the connecting plate employed by me permits the same to yield to the initial strain placed upon the grip pipe in both its upward and downward movements, so that the shock or jar is minimized and the life of the several parts prolonged.

The operation of pulling or putting on a well with my device is very simple so that both time and labor are saved. The wear and tear upon the walking beam is reduced to a minimum and all liability of the grip pipe slipping off the end of the beam is effectually and positively overcome. My connection, therefore, constitutes a safety

device which prevents damage to the grip pipe, the walking beam or the derrick heretofore frequently due to the grip pipe slipping off the beam and relieving the engine of its load so that it would race.

The device is obviously simple and will manifestly reduce the cost of oil well mechanism very appreciably.

What I claim is:—

10 1. The combination with a walking beam, and a grip pipe, of a connecting plate secured upon the walking beam and having its free ends doubled upon themselves to provide yieldable bearings for the grip pipe.

15 2. The combination with a walking beam having a bifurcated end, and a grip pipe working in said bifurcated end and provided with lateral studs, of a connecting plate secured upon the walking beam and

having a bifurcated end, the said bifurcated end being doubled upon the main portion of the plate to provide bearings for the lateral studs of the grip pipe and overhang the same.

3. The combination with a walking beam, and a grip pipe having members projecting laterally over the beam, of bearings on the beam for said members and open to the passage of said members in a direction away from the end of the beam but closed to their passage in the opposite direction.

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

ROBERT LABUDDE. [L. S.]

Witnesses:

G. C. SLOAN,
PETER DONLON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."