E. TIMBS

COMBINED TRAVELING BLOCK AND CASING HOOK

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To all whom it may concern:

Be it known that I, Edward Timbs, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Combined Traveling Block and Casing Hook, of which the following is a specification.

This invention relates to a hoisting device for use in oil fields and other similar places, which device combines a hook with a traveling block.

Heretofore in the construction of oil wells it has been customary to employ a device known as a traveling block which includes a plurality of sheaves carried by a frame having a shackle at the upper and lower end. The lower shackle of the block has been connected to the shackle of a casing hook for suspending the hook and the casing or tubing supported thereon. Such a loose connection between the traveling block and casing hook has been unsatisfactory in that excessive swinging takes place between the shackles of the hook and the traveling block.

Moreover the interlocking shackles of the regular traveling block and casing hook due to their relative movement tend in operation to rapidly wear and unless carefully watched such a connection is dangerous due to the resulting weakening of the shackles.

An object of this invention is to provide a combined casing hook and traveling block in which the distance between the sheaves of the traveling block and hook is substantially shortened and in which the connection between the traveling block and hook is simplified and rendered more permanent so that the swinging between the hook and traveling block of the prior connection may be eliminated and the operation of the device correspondingly improved.

Another object of this invention is to provide a combined hook and traveling block which is simple and economical of construction and to design a combined block and hook the principle of which may be applied to various casing hooks and traveling blocks now in use with slight modifications therein to form the improved device.

Various other objects and advantages of this invention will appear from the description of the accompanying drawings wherein there is illustrated one form or example of a device embodying the present invention.

In the accompanying drawings Figure 1 is a side elevation of a combined casing hook and traveling block.

Figure 2 is a front elevation of Figure 1.

In the drawings 1 indicates an upper shackle or bail fixed at its ends to an upper horizontal pin 2 of the frame of the traveling block. Said pin 2 supports vertically extending side plates 3 of the traveling block which are connected at their opposite end to a lower horizontal pin 4 of the block.

The pins 3 and 4 support a number of spaced apart diaphragms 5 for the traveling block. Between the diaphragms 5 are mounted sheaves 6 upon a central horizontal pin 7 of the traveling block, which said pin 7 is preferably supported by the said plates 3 of the block and extends parallel to the pins 2 and 4. The central diaphragms 5 of the traveling block are preferably held apart by spools 8 on the pins 2 and 4. The side plates 3 are held apart by the ends of the bail 1 and spacers 9 on the pin 2 and by the ends of side-reins 9 on the rod 4.

Said side-reins extend dependably below the frame of the traveling block and are journaled at their lower ends to trunnions 10 extending from opposed sides of a hook supporting block 11. The block 11 supports a casing hook 12 by any preferred or customary means. Preferably the shank 13 of the hook is swiveled on the block 11 in a manner well understood in the art, as shown by patent to Wilson B. Wigle, Reissue 14,257, January 23, 1917.

One of the advantages of the above described combined casing hook and traveling block is that the hook 12 is positioned much closer to the sheaves 6 and in use is held from swinging excessively with respect to the supporting means or sheaves 6. Moreover, the connections between the traveling block and hook are thus materially simplified.

It will also be observed that the side-reins 9 of the device may be readily removed if desired and the customary shackle attached to the lower end of the block and the block employed in connection with various other hoisting or raising devices in the construction of the well.

It will be seen that the device of this invention will reduce the excessive swinging and wear attendant on the use of the prior couplings between the block and hook as
any relative movement between the hook and block is confined to a pivoting around a definite horizontal axis.

While the combined traveling block and casing hook herein described is well suited for the purposes of this invention it is not intended to limit the invention to details of construction of either the traveling block or hook as various modifications may be made in either the traveling block or casing hook without departing from the spirit and purpose of this invention.

This invention is of the scope set forth in the appended claim.

I claim:

A device of the class described, comprising a pair of parallel horizontally disposed pins spaced apart vertically, side plates connecting said pins, a horizontally disposed sheave-mounting pin supported by said side plates between the first mentioned pins, a plurality of separately rotatable sheaves mounted on said sheave-mounting pin, diaphragms between the sheaves, the ends of the diaphragms being secured to the first mentioned pins, a hook-supporting block having opposed trunnions at its sides, a hook supported by the block to swivel on a vertical axis, and independently formed side reins each having one end connected to one trunnion of said block and having their opposed ends connected to the lower horizontal pin, thus supporting said block at a substantial distance from said lower pin.

Signed at Torrance, California this 19th day of December 1923.

EDWARD TIMBS.