(No Model.)

J. P. SMITH.

ROPE SOCKET.

No. 367,560. Patented Aug. 2, 1887.

Fig. 1.

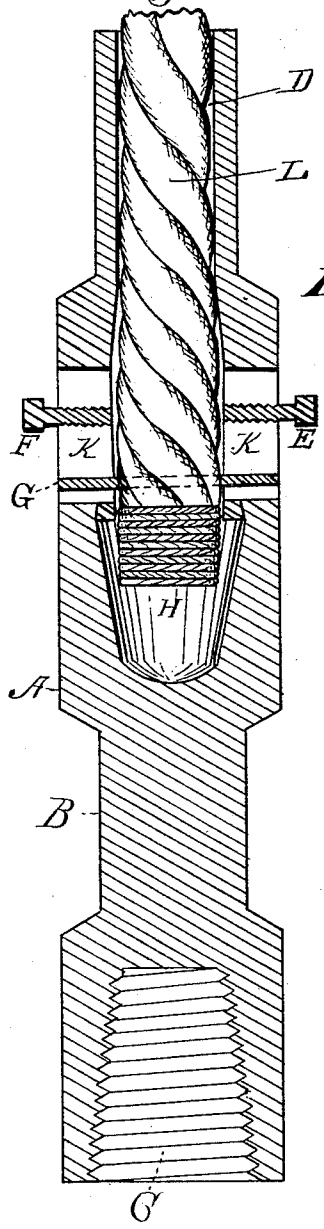


Fig. 3.

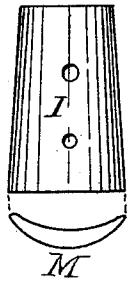
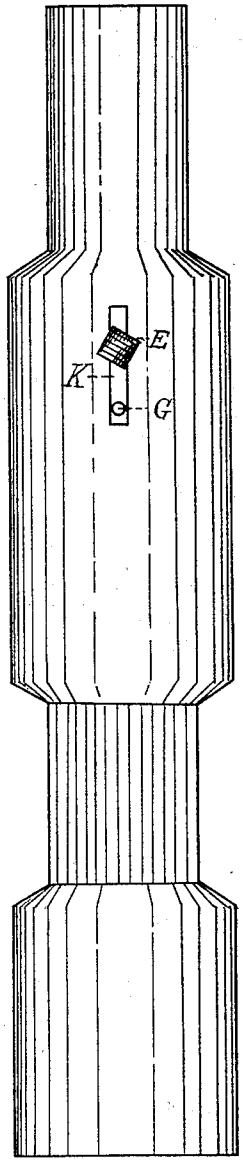


Fig. 2.



Attest;
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UNITED STATES PATENT OFFICE.

JONAS P. SMITH, OF LIMA, OHIO.

ROPE-SOCKET.

SPECIFICATION forming part of Letters Patent No. 367,560, dated August 2, 1887.

Application filed September 24, 1886. Serial No. 214,472. (No model.)

To all whom it may concern:

Be it known that I, JONAS P. SMITH, a citizen of the United States, and a resident of Lima, in the county of Allen and State of Ohio, have invented a new and useful Rope-Socket, of which the following is a specification.

My invention relates to improvements in rope-sockets for use in gripping the rope that holds the tools in oil-wells and other places, and is fully set forth in the annexed specification and drawings.

Figure 1 is a longitudinal sectional view taken through the slot K in Fig. 2. Fig. 2 is a plan view; Fig. 3, detached views of wedges I.

A is my socket or rope-holder offset or shoulder for the wrench to fit on; C, screw-threads that screw onto the tools; D, opening for the insertion of the rope; E F, screws to hold wedges or inclined slips in position against the sides of the socket; G, pin that passes through slot K and through holes in the wedges I and through rope L; H, enlarged part of the groove in the socket having inclined faces, as shown; I semicircular wedges that fit against the inclined walls H, and having holes through them for the passage of pin G and screws E F; K, slot in the side of the socket through which screws E F and pin G pass and through which the wedges are forced up or loosened.

The construction and operation of my device are as follows: The slips I are dropped down to the widest part of the groove H and secured there by the screws E F, passing through the slot K in the side of the socket. The rope is then inserted in the hole, the lower end of the rope being wrapped tightly with cord or twine. The screws E F are then loosened and the wedges or slips I driven up as far as they will go with a punch inserted through slot K. A pin, G, is then inserted in the slot and driven through the rope and slips until the ends are flush or a little under the surface of the socket. The screws E F are then withdrawn and placed in the tool-box for future use. The rope is now securely held in the vise-like embrace of the two slips and by the pin G, and the greater the pull on the rope the tighter the slips I will grasp the rope.

When it is desired to release the rope, a punch is inserted through slot K against the inclined slips or against pin G and the same driven backward toward the enlarged part of recess or hole H, thus releasing their grip on the rope and allowing it to be readily withdrawn after the pin G has been driven out. The screws E F are inserted again through slots K into the slides I to hold them in place as before.

I am aware that ropes have been held in sockets by wedges and pins, and do not claim this idea, broadly; but by my device I am enabled to readily insert the rope and fasten it, or as readily remove the rope from the socket, while in the others the rope must be cut and burned out or other tedious operation gone through.

What I claim is—

1. The combination, with rope-socket A, having the recess H therein, of the wedges I, which fit therein, pin G and screws E F, that pass through the slot K, and wedges I, as and for the purpose set forth.

2. The combination, with rope-socket A and wedges I, that fit in a recess in the same, of the slot K in the side of the socket, through which the wedges can be driven up or down, as and for the purpose set forth.

JONAS P. SMITH.

Witnesses:

WILLIS COPELAND,

E. K. CAMPBELL.