P. E. JENKS.

Sucker-Rod Socket.

No. 167,903. Patented Sept. 21, 1875.

Fig. 1.

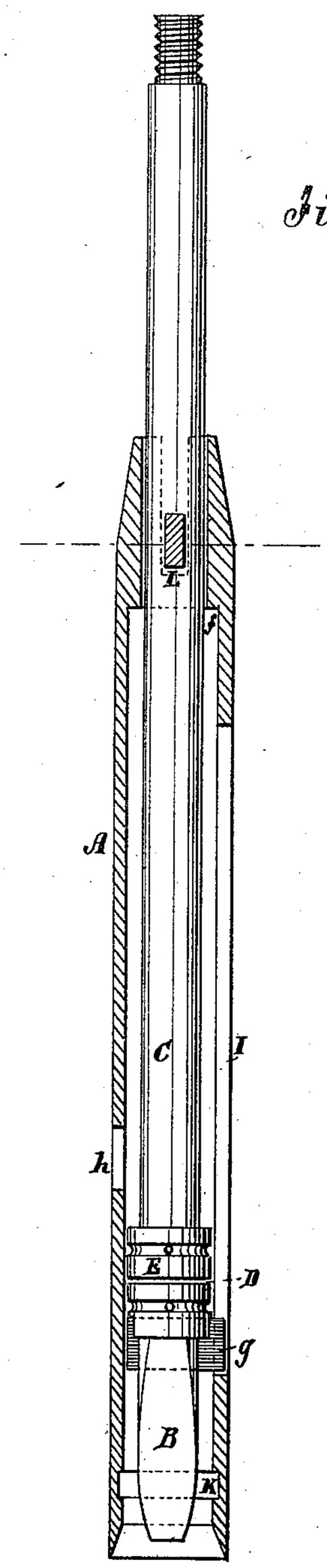


Fig. 2.

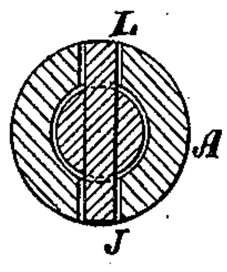
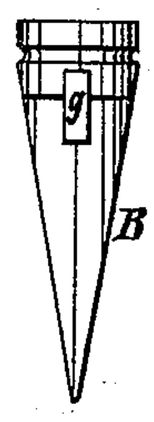


Fig. 3.



WITNESSES:

A. Bennett
A. F. Terry

INVENTOR:

P. E. Jenks

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

PLYMPTON E. JENKS, OF PETROLIA CITY, PENNSYLVANIA.

IMPROVEMENT IN SUCKER-ROD SOCKETS.

Specification forming part of Letters Patent No. **167,903**, dated September 21, 1875; application filed April 10, 1875.

To all whom it may concern:

Be it known that I, PLYMPTON E. JENKS, of Petrolia City, in the county of Butler and State of Pennsylvania, have invented a new and useful Improvement in Sucker-Rod Sockets, of which the following is a specification:

This invention relates to a new and improved method of extracting the lower portion of broken sucker-rods from oil-wells; and consists of a tube-socket, a wedge, and a plunger, constructed and applied as hereinafter described.

In the accompanying drawing, Figure 1 is a longitudinal section of the tube, showing the plunger and the wedge. Fig. 2 is a cross-section of Fig. 1, taken on the line *x x*. Fig. 3 is a view of the wedge, detached.

Similar letters of reference indicate corresponding parts.

A represents the socket, in which the wedge and plunger work. B is the wedge. C is the plunger, which is attached to the end of a sucker-rod. D is the joint between the two. The plunger C works up and down in the tube or socket A. Its upper movement is stopped by head E and shoulder *f*. The head of the wedge nearly fills the socket, and is fastened in the socket by a key, *g*, which key may be removed through the aperture *h*. One end of this key extends through the socket and works in the long slot I. In the top of the socket there is a slot, J, (see Fig. 2,) which receives the key L through the plunger. This slot and key allow the socket to be turned by the rod or plunger, to allow the wedge and the end of the socket to fit onto the end of the broken rod in the well.

When the socket is properly adjusted on the end of the broken rod, the wedge, which has been pushed upward, is now driven down with the plunger-rod, which forces a portion of the broken rod into the groove K, and thereby holds the broken rod to the socket. When the socket is raised from the tubing of the well, the wedge, being held by the key at the bottom of the long slot I, will be raised, also, and the broken rod with it.

This socket A, it will be understood, works within the well-tube; and heretofore, when a sucker-rod broke or pulled apart, it has been the work of weeks to remove the broken part at a considerable depth below the surface.

With this socket and wedge, connected with the plunger and sucker-rod, the broken portion is readily drawn up, and hours, instead of weeks or months, are employed to accomplish the task.

Frequently, when a sucker-rod has broken, the entire tubing of the well has had to be taken up.

The broken rod may be held without the groove K.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The socket A, wedge B, and plunger C, substantially for the purpose described, either with or without the groove K.

2. The socket A, for the purpose described.

PLYMPTON E. JENKS.

Witnesses:

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