

W. S. ROBERTS.
Coupling for Sucker-Rods.

No. 197,667.

Patented Nov. 27, 1877.

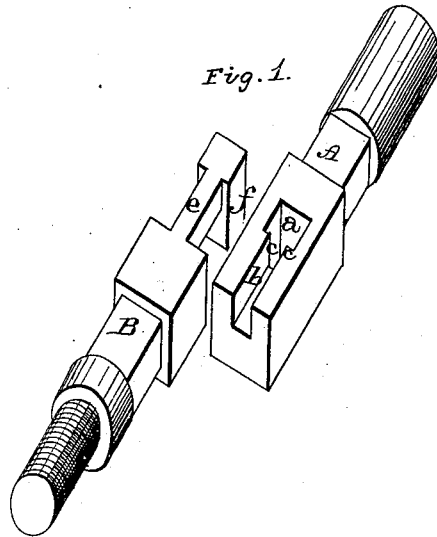
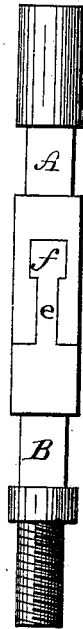


Fig. 2.



WITNESSES:

J. W. Garner.
W. S. D. Haines

INVENTOR:
W. S. Roberts,
per
F. A. Lehmann,
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM S. ROBERTS, OF MARTINSBURG, ASSIGNOR OF ONE-HALF HIS RIGHT
TO IRA C. SHAW, OF PARKER TOWNSHIP, PENNSYLVANIA.

IMPROVEMENT IN COUPLINGS FOR SUCKER-RODS.

Specification forming part of Letters Patent No. **197,667**, dated November 27, 1877; application filed
October 9, 1877.

To all whom it may concern:

Be it known that I, WILLIAM S. ROBERTS, of Martinsburg, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Connecting Sucker-Rods for Oil-Wells; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in devices for connecting sucker-rods for oil-wells; and it consists in securing to the ends of the rods a connecting device by which the rods may be readily attached together and again separated, when required, without danger of becoming disconnected while in operation, as will be more fully described hereinafter.

The accompanying drawings represent my invention.

A and B represent each a part of the connecting device, having at their ends the necessary screws for an attachment to the sucker-rods.

Through the part A, at a suitable distance from its lower end, is a square opening, *a*, and from this opening downward a groove, *b*, extending to the lower edge of A, and, being narrower than the opening, forms the shoulders *c c*, as shown in the drawing.

The part B has at its upper edge the narrower projection *e*, and on it a square head, *f*. The projection *e* fits in the groove *b*, while the head *f* fills the opening *a*, and rests upon the shoulders *c c*.

In order to apply this device, it is simply necessary to screw its parts to the ends of two rods, and push the head *f* into the opening *a*, when the connection is complete.

If required to separate the rods, the process is the reverse.

When thus connected and inserted into a tube of a diameter not much exceeding the square of the device, it is impossible that any two rods should become separated, as the space would not admit of a lateral movement, and without it the head *f*, which holds the parts together, cannot be withdrawn.

The object of my invention is to overcome the difficulties existing when the rods are connected by screws, as is now generally the case.

It frequently occurs that the screws do not exactly fit each other, and have to be adjusted, which causes great loss of time. Again, after having adjusted the screws, it is of common occurrence to see them work loose when in operation. Then the rods have to be drawn out or a break may occur, and should this happen, more time is lost.

Not only when the rods are in the tube will my invention secure their attachment, but they cannot become disconnected of their own accord while standing on end in the derrick, or after having been drawn out of the tubing, for the joint, from its formation, will support itself in any position.

Having thus described my invention, I claim—

In a device for connecting sucker-rods for oil-wells, parts A and B, groove *b*, opening *a*, projection *e*, and head *f*, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of September, A. D. 1877.

WILLIAM S. ROBERTS

Witnesses:

JOHN J. McCORMICK,
BASCOM W. TYRREL.