(No Model.)

J. H. WILLIAMS.

Packer for Oil Wells.

No. 237,937. **Patented Feb. 15, 1881.**

Fig. 1.

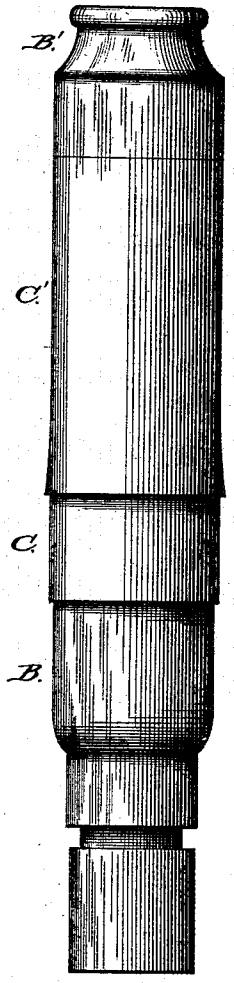
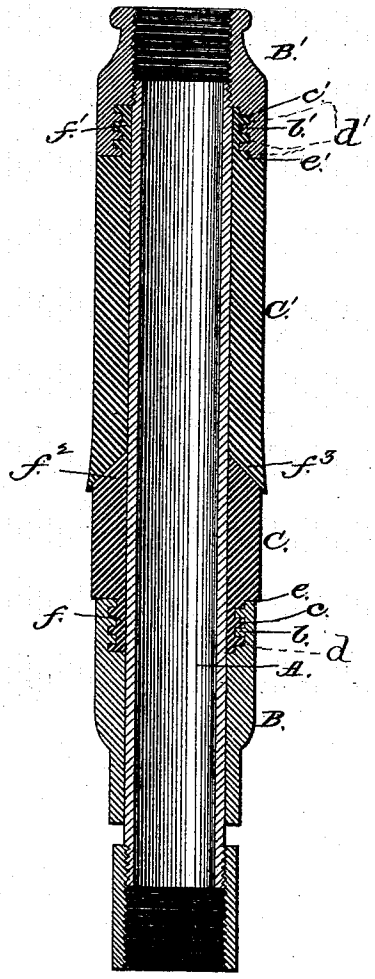


Fig. 2.



WITNESSES
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UNITED STATES PATENT OFFICE.

JOHN H. WILLIAMS, OF CUSTER CITY, PENNSYLVANIA.

PACKER FOR OIL-WELLS.

SPECIFICATION forming part of Letters Patent No. 237,937, dated February 15, 1881.

Application filed December 11, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. WILLIAMS, of Custer City, in the county of McKean and State of Pennsylvania, have invented a new and valuable Improvement in Water-Packers for Oil-Wells; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side view. Fig. 2 is a longitudinal section.

This invention relates to water-packings for oil-wells, more especially to the way of securing the packing in the sustaining-caps.

The invention consists in the construction hereinafter described.

In the drawings hereto annexed, A is the well-tube, surrounded by the packing device.

B B′ are the caps holding the rubber packing-cylinders C C′. The bores *b b′* of these caps are female-screw-threaded at *d d′*, and the ends *c c′* of the packing-cylinders are reduced, as shown, having a shoulder, *e e′*. These reduced portions *c c′* are male-screw-threaded, as shown at *f f′*, corresponding with the threads *d d′* of the caps. The lower cylinder, C, has its upper end, f^2, beveled off, and the lower end, f^3, of upper cylinder, C′, is concaved out correspondingly.

In use the upper cylinder, C′, is screwed into the bore of the upper cap, B, and the lower cylinder into the lower cap. They are then slipped on the tube A, the lower cap being left loose and the upper cap made fast. Pressure upon the upper cap forces the bevel of the lower cylinder into the concave of the upper cylinder and pushes the rubber of the latter out, forming a close packing between the well-tube and the bore in the ground.

The screw-threaded connection is a simple and effective one, the rubber being securely held without any danger of the connection being broken by any pressure or twist, and at the same time readily removable when desired.

I am aware that a packing-ring surrounding the well-tube and held below by an annular ledge screwed upon the tube has been expanded against the wall of the bore by the weight of the upper sections of the tubing; also, that a section of tubing resting upon the bottom of the well has been provided with an annular flange, upon which rests an annular packing-block of rubber, which is expanded against the wall of the bore by a conical wedge surrounding the tube above the rubber block to pack the well; and I do not claim either of said constructions, but desire protection only for the construction herein shown and described, and hereinafter claimed.

What I claim is—

In a packer for oil-wells, the combination, with the tube A, of the caps B B′, the bores *b b′* of which are internally threaded at *d d′* and provided with the shoulders *e e′*, and the packing-cylinder C, having its lower end, *c*, reduced and externally threaded at *f* and its upper end beveled upward and inward, and the upper packing-cylinder, C′, having its upper end, *c′*, reduced and externally threaded at *f′*, and having its lower end beveled inward and upward to correspond with the bevel of the cylinder C, substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN HENRY WILLIAMS.

Witnesses:

WILLIAM M. RANKIN,

THOS. P. BARRETT.