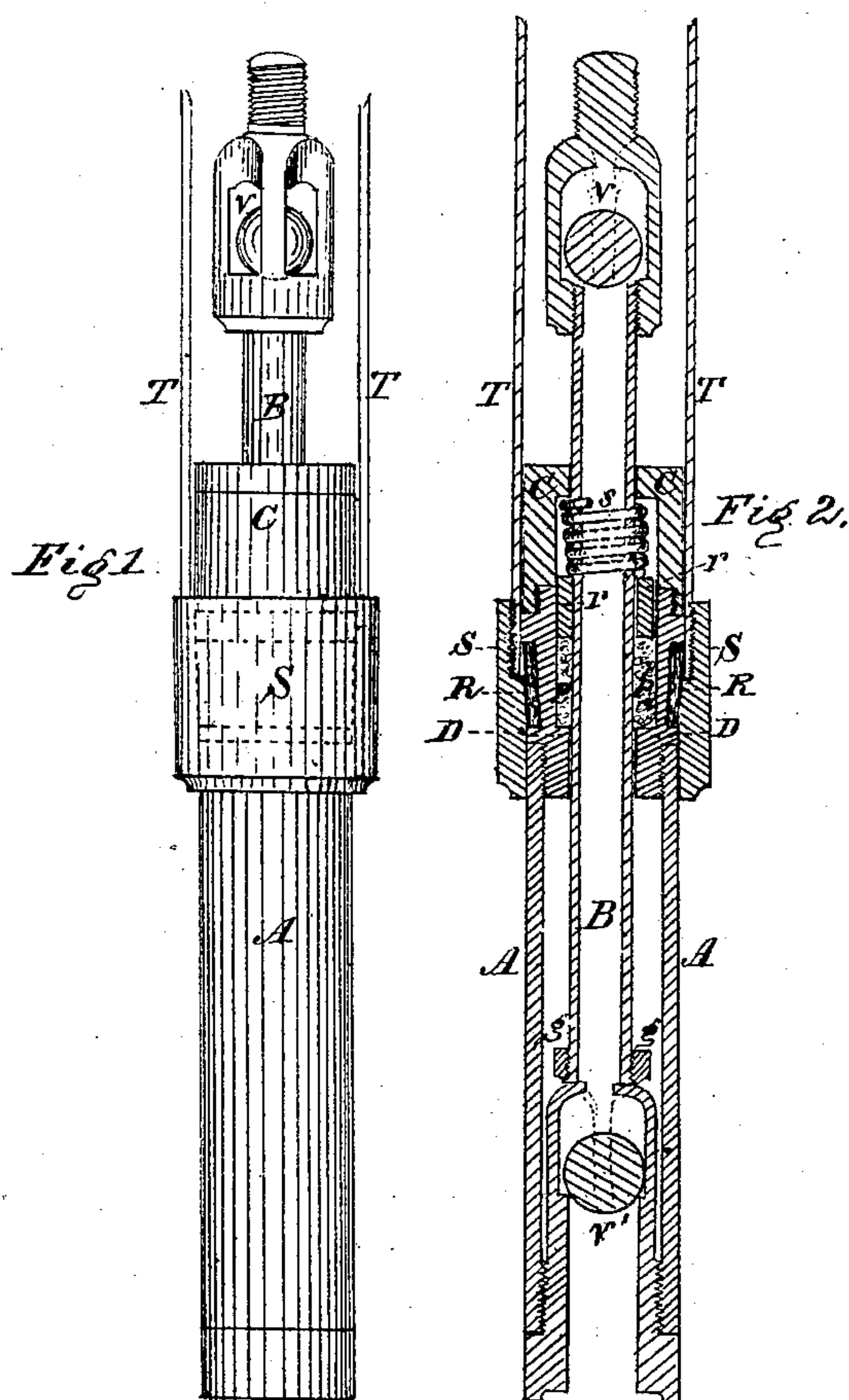


A. P. ODELL.

Oil-Pumps.

No. 134,093.

Patented Dec. 17, 1872.



Inventor

Albert P. Odell

per W. R. Bois
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Witnesses
William F. Hickey
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UNITED STATES PATENT OFFICE.

ALBERT P. ODELL, OF SHAMBURG, PENNSYLVANIA.

IMPROVEMENT IN OIL-PUMPS.

Specification forming part of Letters Patent No. 134,093, dated December 17, 1872.

To all whom it may concern:

Be it known that I, ALBERT P. ODELL, of Shamburg, in the county of Venango and State of Pennsylvania, have invented certain Improvements in Oil-Pumps, of which the following is a specification:

My invention relates to pumps for oil-wells; and consists in a certain improved combination, construction, and arrangement of parts, as hereinafter described.

Figure 1 is a longitudinal view of the exterior. Fig. 2 is a longitudinal section through the center.

Similar letters of reference indicate corresponding parts in the several figures.

A is the working-barrel; B, the hollow piston stem or plunger which carries the working-valve *v*, the top of the valve-cage being attached to the sucker-rods by screwing onto it. The lower ball-valve *v'* and cage is attached to the lower end of the working-barrel A. To the upper end of the working-barrel A I attach the stuffing-box D, with its cap C, containing the packing *p*, gland *r*, and spiral spring *s*. The spiral spring *s* forces the gland *r* down upon the packing as fast as it wears, thus making the arrangement a self-packer. To the lower end of the tubing T I attach, by screwing on the outside thereof, the socket S, with a bevel on the inside, so as to fit closely on the leather band R, which is let into the outside of the stuffing-box of the pump. The pump, being lowered into the socket S, is fastened thereto by a downward jar, and when it is

desired to withdraw the pump from the socket and tubing the hollow piston-rod or plunger B is raised till the collar *g*, attached to the lower end thereof, strikes the lower shoulder of the packing-box D and loosens the pump from the socket. The pump with all its parts is then withdrawn without drawing out the tubing.

In operating my improved pump, the working-barrel A, with the standing-valve *v'* attached to the lower end, is lowered to the bottom of the well. The upper end of the hollow plunger B being attached to the sucker-rods, the plunger is worked up and down and the oil forced up through the plunger into the tubing above, and thus flows up and out at the top.

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

1. The self-packer, consisting of the stuffing-box D, packing *p*, gland *r*, and spiral spring *s*, constructed and arranged substantially as set forth.

2. The socket S, constructed substantially as and for the purposes set forth.

3. The arrangement and combination of the plunger B, stuffing-box D, working-barrel A, socket S, and tubing T, substantially as and for the purposes set forth.

ALBERT P. ODELL.

Witnesses:

D. L. SKINNER,
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