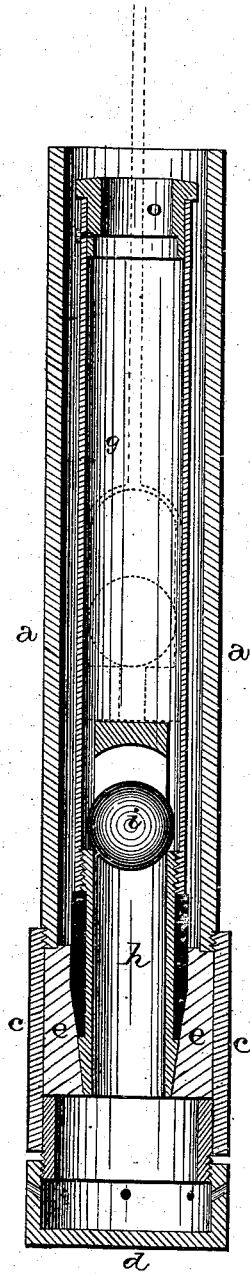


W. TURNER.
PUMPS FOR OIL-WELLS.

No. 187,572.

Patented Feb. 20, 1877.



WITNESSES.

J. B. Garner
R. M. Barr.

INVENTOR.

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per
F. A. Lehmann, Atty.

UNITED STATES PATENT OFFICE.

WILLIAM TURNER, OF BARNHART'S MILLS, PENNSYLVANIA.

IMPROVEMENT IN PUMPS FOR OIL-WELLS.

Specification forming part of Letters Patent No. **187,572**, dated February 20, 1877; application filed January 12, 1877.

To all whom it may concern :

Be it known that I, WILLIAM TURNER, of Barnhart's Mills, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Pumps 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 pumps for oil-wells; and it consists in the arrangement and combination of parts that will be more fully described hereinafter, whereby a cheaper and more efficient pump is produced.

The accompanying drawings represent my invention.

a represents the tubing of the well, which may be of any size desired, and which has the short section *c* screwed to its lower end, and the lower end of this section is closed by a perforated cap, *d*. In this short section *c* is formed a soft-metal seat, *e*, upon which rests the lower end of the barrel *g*, the said end being packed in any suitable manner so as to form a water-tight joint. The lower end *h* of this barrel *g* is made to screw off and on, so that the ball-valve *i* can be inserted and removed at pleasure. In the upper end of the barrel is fastened by means of a set-screw, a bushing, *o*, which serves to prevent the valve, which is

fastened to the lower end of the pump-rod from coming out of the barrel. As the barrel is considerably smaller than the casing, there is a space between the two, which is filled by the fluid in the well, and thus there is the same pressure inside the barrel that there is out.

In drawing the pump-rod up out of the well when repairs are needed, the valve on its end catches behind the lower edge of the bushing *o* in the top of the barrel, and draws the whole barrel up with it. By this arrangement the barrel will be raised and lowered inside of the casing with the rod, as may be desired; and where this can be done the needed repairs can be more readily and easily made, and the pump worked to a much better advantage.

Having thus described my invention, I claim—

The casing *a*, provided with the short removable section *c* at its lower end, in which is made the seat *e*, in combination with the barrel *g*, having the removable packed end *h*, so shaped as to fit the seat *e*, and the bushing *o*, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of December, 1876.

WILLIAM TURNER.

Witnesses:

J. H. CUNNINGHAM,
F. M. SMALL.