D. L. LEWIS.

PUMP-ROD ADJUSTER.

No. 191,447. Patented May 29, 1877.

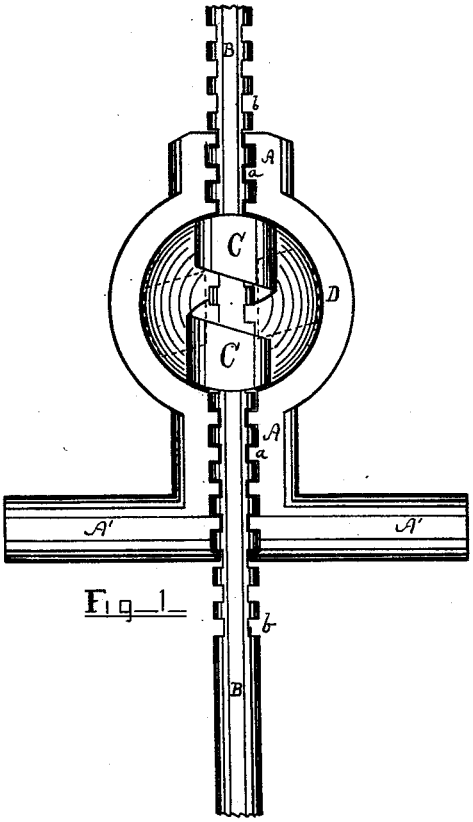

Fig. 1.

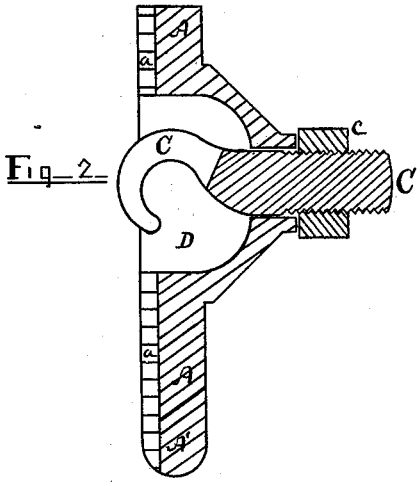

Fig. 2.

Witnesses

Geo. A. Sturgeon

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UNITED STATES PATENT OFFICE.

DANIEL L. LEWIS, OF LOVELL'S STATION, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM BOYNTON, OF PETERSBURG, PENNSYLVANIA.

IMPROVEMENT IN PUMP-ROD ADJUSTERS.

Specification forming part of Letters Patent No. **191,447**, dated May 29, 1877; application filed February 22, 1877.

To all whom it may concern:

Be it known that I, DANIEL L. LEWIS, of Lovell's Station, in the county of Erie and State of Pennsylvania, have invented a new and useful Pump-Rod Adjuster; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention is a device for attaching the piston-rods of Artesian wells to the working-beams, and is known as a piston-rod or polished-rod adjuster.

In deep bored wells it is necessary to the operation of the pump that the piston shall be inserted in the working-barrel, and the valves adjusted at their relative proper positions; and in this class of wells the barrel of the pump is situated at so great a distance from the surface that no measurement can be taken by which this can be perfectly effected. It therefore becomes necessary to provide at the top, at or near the working-beam, a device by which this perfect adjustment of the length of the piston-rod can be effected.

Various devices have been heretofore provided for this.

The object of my invention is to provide a device for effecting this purpose which shall be cheap and quick of adjustment, and which shall not depend upon the friction of a clamp to retain the rod in proper place when once adjusted.

The chief place in which such devices are used is on oil-wells, and when there used the parts are apt to be oily and slippery, and when a simple clamp is used to retain the rod it becomes very difficult to do it and prevent slipping; and when it is done there are so many screw-bolts to operate that to make a change requires considerable time.

The manner in which I accomplish my purpose, and the means I use for doing it, will fully appear in the following general description.

My device is shown in the accompanying drawing by two figures. Of these, Figure 1 is a front elevation of my adjuster and the polished rod. Fig. 2 is a transverse vertical section of the adjuster, with the rod removed, said section being taken on the line *x x* in Fig. 1.

The parts of my device are as follows: A is the body of the adjuster. A′ A′ are arms extending from the body laterally, and by which it is journaled to the working-beam or to a stirrup or clevis, which may connect it to the working-beam. B is the upper end of the piston-rod. C is a retaining-hook. D is a concavity, in which the hook C is seated and swiveled.

The adjuster A is provided with a groove across its length vertically, in which the rod B sets. This groove is provided with notches *a a*, and the rod B is provided with notches *b b*, so that when the rod enters the groove the notches interlock. This holds the rod from slipping, and enables it to be raised or lowered to any point desirable. The rod B, when once set, is retained by a hook, C.

In Fig. 1 the hook is shown in position to retain the rod in positive lines, and by dotted lines it is shown in position to allow the rod to be removed. This hook has two prongs, one of which hooks over the rod to the right, and the other to the left.

Fig. 2 shows one of the prongs by a side view, the other being removed by the section. The hook has a shank running through the bottom of the cup-shaped concavity D, and a nut, *c*, at its outer end for setting it to hold the rod.

When this nut is loosened sufficiently for the ends of the hook-prongs to slip over the rod, it can turn to the position shown in Fig. 1 by dotted lines, and then the rod can be removed.

The hook does not clamp the rod to prevent it slipping, for this is done by the notches. All the hook does is to retain the rod in the notches. This could be done by any clasping device.

The whole adjuster may set with its arms journaled upon the top, or within the beam; or it can be attached to the beam by a clevis or stirrup arrangement.

What I claim is as follows:

1. The combination, with a pump-rod or rod connecting with the sucker-rod, of an ad-

justing device having a body, A, with notched vertical groove or channel, for the purposes set forth.

2. The body A, with journal-arms A′ A′, notched vertical groove or channel, and retaining-clasp, in combination with the notched pump-rod B, substantially as and for the purposes set forth.

3. In combination with an adjustable pump-rod coupling, the hook C, for receiving and retaining the rod, substantially as and for the purposes set forth.

In testimony whereof I, the said DANIEL L. LEWIS, have hereunto set my hand.

DANIEL L. LEWIS.

Witnesses:

JNO. K. HALLOCK,

GEO. A. STURGEON.