

A. H. JARECKI.
Pump-Rod Adjusters for Oil-Well.

No. 196,231.

Patented Oct. 16, 1877.

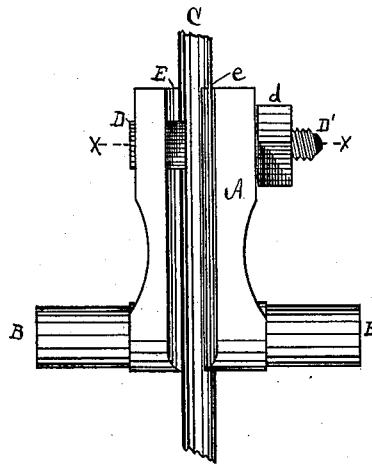


Fig. 1

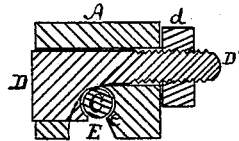


Fig. 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

ALBERT H. JARECKI, OF ERIE, PENNSYLVANIA.

IMPROVEMENT IN PUMP-ROD ADJUSTERS FOR OIL-WELLS.

Specification forming part of Letters Patent No. **196,231**, dated October 16, 1877; application filed June 29, 1877.

To all whom it may concern:

Be it known that I, ALBERT H. JARECKI, of Erie, in the county of Erie and State of Pennsylvania, have invented a new and useful Device for Adjusting the Piston-Rod of Oil-Well Pumps; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the construction of what are known as "pump-rod adjusters for oil or other deep wells." These devices are used for adjustably attaching the pump-rod to the walking-beam. The rod, which is to be adjustably attached, is small—about one and one-fourth of an inch in diameter generally. It is perfectly smooth, and hence it is generally called the "polish-rod." When used in an oil-well it is apt to be oily, and, being small and smooth, it is not easy to securely clamp it, especially when the well is very deep, for it sustains the whole weight of the pump and rod and the column of fluid in the well, and as these wells are often nearly two thousand feet deep, this weight is very great.

A perfectly-acting adjuster should possess the following requisites: First, it should clamp as great a space in length and circumference of the rod as possible; second, the clamping should be firm and solid, so as to surely retain it, and yet not injure or be liable to injure the polished surface of the rod; third, it should be easy of manipulation, and yet the clamping mechanism should be in no danger of becoming loosened by the jarring incident to the working of the walking-beam; fourth, because of the often-recurring necessity of drawing the rod from the well for repair of either the pump, the tubing, or the rod itself, it is of great convenience that the rod should attach and detach to the adjusting device laterally; fifth, the whole device should be cheap.

The object of my invention is to construct an adjusting device which shall possess these essential requisites.

Prior inventors have often undertaken the task, and there is little new to be added to the art. Douglas Bly's patent of 1868, reissued 1870, clamped a sufficient amount of the surface of the rod; but it was crude in the manner of its adjustment, being tedious to operate, and not possessing the essential of lateral

attachment and detachment. The patent to the same inventor dated February 3, 1874, clamped the requisite amount of rod, and it was quite easily manipulated; but it did not possess the feature of lateral adjustment. The patent to Reardon of September 26, 1876, possesses the feature of lateral adjustment; but the wedge-shaped bolt used to clamp the rod, having so short a bearing on the rod, is apt to mar or indent the rod. The patent to Gifford and Abell clamps the rod over all the space possible; but the cam-lever which operates the clamping device is apt to become jarred, so as to loosen the clampings by the action of the walking-beam.

I refer to the above as illustrative of the state of the art, and not for the purpose of disparagement, but solely to more perfectly point out what I consider to be new with myself.

My device is shown in the accompanying drawings, as follows:

Figure 1 is a front elevation of my adjuster with a portion of the polished rod shown. Fig. 2 is a transverse section (horizontal) on the line *x x* in Fig. 1.

A is the trunnioned head or body. In the face of this body A is a groove, E, with overhanging or overreaching lip *e*, which is very similar in form to that shown in patent to Gifford and Abell, (*supra*), and differs from the groove shown in patents to Bly, 1874, and Reardon, 1876, in having the overhanging lip, which surrounds a large portion of the circumference of the rod.

In place of what Gifford and Abell call a "gib," for surrounding the remaining portion of the rod, I use a sliding bar, D, which has a hook-shaped jaw, which surrounds the remaining portion, or nearly so, of the rod. This bar D operates in a mortise through the head, back of the groove, which mortise is transverse the walking-beam, and hence the action of the bar is transverse the walking-beam, and consequently the hook-shaped jaw will clamp the rod in behind the overhanging lip when the bar D is properly operated by the jam-nut, which is arranged upon it in the manner shown. When the rod is clamped there is no danger of its becoming loosened by the jarring caused by the action of the

walking-beam, as is believed to be the case when the clamping device is operated by a cam-lever or similar device.

The action of my device is simple and easy, and it can be quickly adjusted. There is perfect lateral attachment. The whole surface of the rod, or nearly so, within the body A is griped. It is impossible to mar or injure the surface of the rod. The device is very cheap, for the mortise and groove are made in the operation of casting the head A, and the sliding bar D, with its hook-shaped jaw, is cast in form for use. There is very little machine-work needed to finish the device, the turning up of the trunnions, planing out a portion of the groove and the inside of the hook-shaped jaw, and cutting the screw-thread on the bar being all.

It will be seen that I consider the trunnioned head with a groove with an overhanging lip to be old, (see patent of Gifford and Abell, *supra*;) that a sliding bolt operated by a nut

for retaining a rod within a groove is also old, (see patents to Bly, 1874, and Reardon, 1876, *supra*;) but I believe my combination, arrangement, and operation of these old elements is new, and that the result of my combination and arrangement is a more perfect adjuster than has been heretofore made. Therefore,

What I claim is—

The trunnioned head A, having groove E, with overhanging lip *e* and mortise back of and transverse the mouth of said groove, in combination with the sliding bar D, with hook-shaped jaw and operating-nut *d*, said parts being arranged as and operating in the manner and for the purposes set forth.

In testimony whereof I, the said ALBERT H. JARECKI, have hereunto set my hand.

ALBERT H. JARECKI.

Witnesses:

JNO. K. HALLOCK,

JNO. D. MCFARLAND.