J. S. ATKINSON.

ADJUSTING CLAMP.

No. 192,048. Patented June 19, 1877.

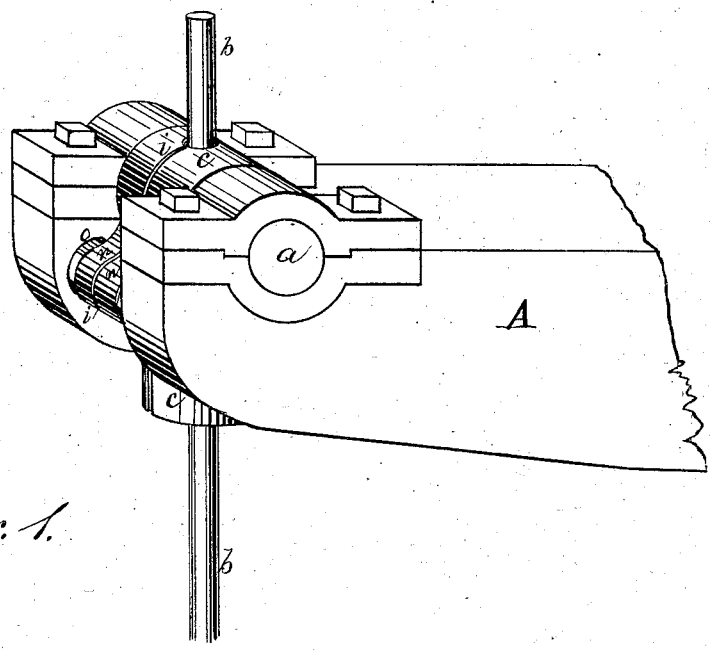


Fig. 1.

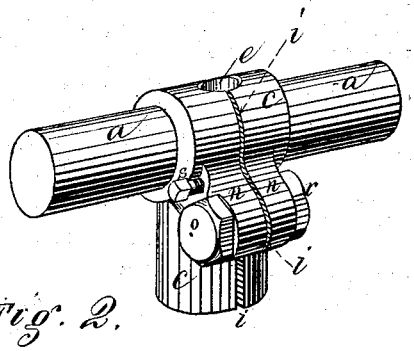


Fig. 2.

Witnesses
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# UNITED STATES PATENT OFFICE.

JAMES S. ATKINSON, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO JONES & LAUGHLINS, OF SAME PLACE.

## IMPROVEMENT IN ADJUSTING-CLAMPS.

Specification forming part of Letters Patent No. **192,048**, dated June 19, 1877; application filed May 28, 1877.

*To all whom it may concern:*

Be it known that I, JAMES S. ATKINSON, of Pittsburg, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Adjusting-Clamps; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which, like letters indicating like parts—

Figure 1 is a perspective view of my improved adjusting clamp or coupling, in connection with the walking-beam and polished or sucker rod of an oil-well pump, and Fig. 2 is a like view of the clamp alone.

It is essential to the best results in pumping oil from wells that the piston or suction valve should work at a certain point in the well as related to the oil-bearing strata, which point can ordinarily be determined only by repeated experiment. It is therefore desirable that some convenient means of varying the length of the piston or sucker rod should be provided which will readily permit of such adjustment; also, the upper end of the sucker-rod is made smooth and true, as it works through a stuffing-box, cold-rolled iron being largely used for the purpose. It is therefore essential that this adjusting-clamp be so made as to gripe firmly and securely such polished rod, so as to preserve the proper adjustment when once made.

These results I accomplish by making the clamp or coupling of a T form, as shown in Fig. 2, having two journals or pivots, *a a*, of suitable construction, and a central body or part, *c*. The journals *a a* are pivoted, in any convenient way, to the walking-beam A or driving mechanism, so that by swinging or turning on the journals the clamp may maintain an upright, or nearly upright, position. The body part *c* has a hole, *e*, extending through its length of the size, or nearly so, of the rod *b*, which it is intended to receive, as shown in Fig. 1. This hole *e* may be made in casting by means of a suitable core, or it may be bored and reamed; but I prefer, in any case, to make it true and smooth, so that the whole, or nearly the whole, of the surface of its side walls may bear upon the interposed rod, and serve to securely clamp the same. A slit or seam, *i*, is also made in one side of the piece *c*, extending through its length, and opening into the hole *e*. This slit may be made in casting by means of a diaphragm, or by sawing, planing, or otherwise. Lugs *n* are also cast or otherwise provided on each side of the slit, and a bolt, *o*, passed through suitable holes in the lugs.

By screwing up the nut *r* the hole *e* will be contracted, and its walls will be clamped or firmly bound upon the rod *b*. By unscrewing the nut *r* the seam or slit *i* may be opened out in any convenient way—as by forcing a wedge therein, or by means of a set-screw, *s*, which passes through one of the lugs and bears against the other. The result of such opening of the seam will be to enlarge the hole *e*, so that the rod *b* may be moved up or down therein, or, as is often desired, may be entirely removed, and, when replaced, again clamped, as desired.

One advantage arising from my invention is the fact that, by means of such a clamp, a tighter connection may be made to the polished rod than can be done by the ordinary means in use; and, also, by means of it the desired adjustments can be more readily made.

The main distinguishing features of the device described consist in the perforated open-sided solid body-part or head *c*, whereby the walls of the hole or perforation *e*, extending almost or entirely around, and, at least, more than half-way around, the piston or sucker rod, may be wrapped around or be sprung onto the rod by the partial or complete closing together of the sides of the slit or open side.

I claim herein as my invention—

1. A perforated open-sided solid adjusting-clamp, the walls of the hole or perforation extending almost or entirely around, and, at least, more than half way around, the piston or sucker rod, and adapted to be sprung into a griping contact with the rod by the partial or complete closing together of the sides

of the slit or open side, substantially as set forth.

2. In a sucker-rod coupling or clamp, the combination of piece *c*, having a hole, *e*, for the reception of the rod, and slit *i*, with lugs *n*, bolt *o*, and nut *r*, substantially as set forth.

In testimony whereof I have hereunto set my hand.

JAMES S. ATKINSON.

Witnesses:
J. J. MCCORMICK,
CLAUDIUS L. PARKER.