H. FREEMAN.

PUMP-ROD ADJUSTER.

No. 192,251. Patented June 19, 1877.

Fig 1

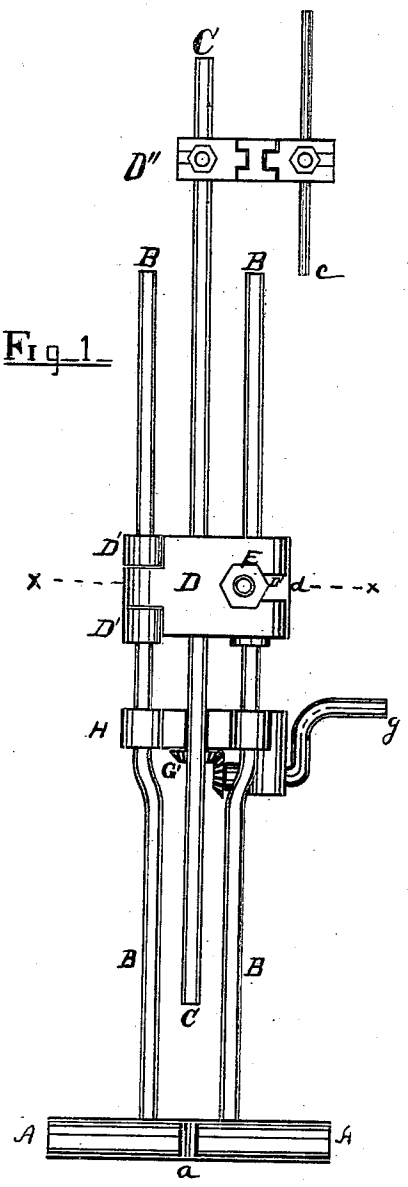


Fig 2

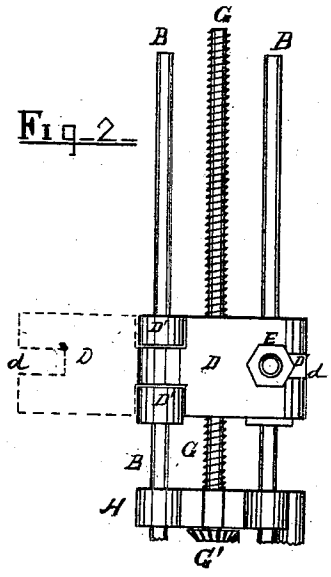
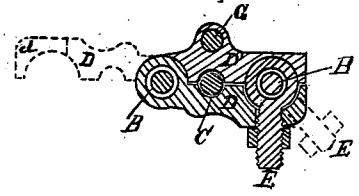


Fig 3



Witnesses

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UNITED STATES PATENT OFFICE.

HIRAM FREEMAN, OF PARKER'S LANDING, ASSIGNOR TO JARECKI MANUFACTURING COMPANY, OF ERIE, PENNSYLVANIA.

IMPROVEMENT IN PUMP-ROD ADJUSTERS.

Specification forming part of Letters Patent No. **192,251**, dated June 19, 1877; application filed April 23, 1877.

To all whom it may concern:

Be it known that I, HIRAM FREEMAN, of Parker's Landing, in the county of Armstrong and State of Pennsylvania, have invented a new and useful Improvement in Pump-Rod Adjusters for Deep Wells; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the construction of piston-rod adjusters for oil or other deep-well pumps.

My invention consists, first, in the construction of the clamp; second, in the combination of said clamp with journal-arms, by which it is attached to the walking-beam; third, in the combination of said clamp with devices whereby the pump-rod can be adjusted without unclamping the clamp, and, if desired, while the pump is in operation.

My device is shown in the accompanying drawing, as follows: Figure 1 is a front elevation of my whole device in the position it occupies when upon the walking-beam. Fig. 2 is the same view of the upper portion of the same, with the pump-rod removed, displaying the adjusting-screw, by which the pump-rod is adjusted, without unclamping the clamp. Fig. 3 is a section of the clamp on the line *x x*, Fig. 1.

A A are the journal-arms, which rest upon the top of the walking-beam, and are secured there in any way desirable. From the bar forming these arms A A there are two rods or bars, B B, extending upward. These are stiffened and strengthened by a cross-piece, H, at any desirable distance above the bar A A. Upon these rods, above the bar H, is placed the clamp D D′, in such a manner that the rods serve as guides for the clamp to slide up and down on, and so that one of said rods forms the hinge-pin for the leaves of the clamp, and the other the pivot for the swinging jam-nut bolt. The clamp above named is formed of two leaves, D and D′, (seen best in Fig. 3.) These leaves, as before stated, are hinged on one of the upright rods B in such a way that the leaf D can swing out, as shown by dotted lines in Figs. 2 and 3. The leaves of the clamp are held together by the jam-nut and bolt E, in such a manner as to gripe and hold the pump-rod or piston-rod C.

This jam-nut bolt operates in a slot, *d*, in the swinging leaf D, and is pivoted on one of the uprights B in such a way that when the nut is loosened the bolt can swing out of the slot *d*, and permit the leaf D to open. (See dotted lines in Fig. 3.)

To raise and lower the clamp on the guide-rods B B, I use a screw, G, which passes through an extension on the side of leaf D′ of the clamp, in such a way that the said extension operates as a nut on the screw G. This screw is journaled on the cross-piece H, and is operated by gearing G′ and the crank *g*. (See Figs. 1 and 2.) Therefore, when the clamp is griped to the rod C, and the crank *g* is operated, the rod is raised or lowered, as desired, and this may be accomplished when the walking-beam is in operation, if necessary.

The clamp being an essential feature of my invention, I do not wish to be restricted to its use with the adjusting device named, for various adjusting devices may be contrived, and it can be used without using any adjusting device at all; for the rods B B may be very short, and the clamp be placed in close proximity with the journal-arms A A, in which case the pump-rod will be adjusted by opening the clamp and clamping it down again at some other point on the rod.

The rods B B may spring from the bar A A either at its ends or near the middle, as shown.

In Fig. 1 I show, on the upper end of the pump-rod C, a double clamp, D″, which is very like the large clamp, only it is double, and clamps the two rods, one of which is the regular pump-rod C, and the other, *c*, is a side rod, which enters the well between the tubing and the casing, and then operates a pump for pumping the water out of the casing.

This is an auxiliary arrangement, and is only used when necessity requires it, and by the use of my double clamp it can be attached and detached, and adjusted when in operation very easily.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the journal-arms A A and uprights B B, of the hinged clamp D D′, substantially as and for the purposes mentioned.

2. The combination, with the journal-arms A A and uprights B B, of the clamp D D′, arranged to slide upon the said uprights, as and for the purposes mentioned.

3. In combination with the pump-rod C and a clamping device for holding the same, the adjusting mechanism G G′, or its equivalent, for adjusting said rod up and down, for the purposes mentioned.

In testimony whereof I, the said HIRAM FREEMAN, have hereunto set my hand.

HIRAM FREEMAN.

Witnesses:
JNO. D. MCFARLAND,
F. CUDTZE.