F. JEANNERAT & L. E. SIMONS. Rock-Washer for Oil-Wells.

No. 206,242

Patented July 23, 1878.

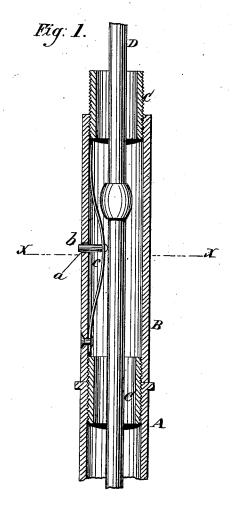
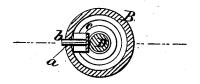


Fig: 2



WITNESSES:

Achilles Schehl. 6. Bedguick INVENTOR:

F. Gannerat

L. E. Simons

ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANK JEANNERAT AND LEWIS E. SIMONS, OF EDENBURG, PENNSYLVANIA.

IMPROVEMENT IN ROCK-WASHERS FOR OIL-WELLS.

Specification forming part of Letters Patent No. 206,242, dated July 23, 1878; application filed June 18, 1878.

To all whom it may concern:

Be it known that we, FRANK JEANNERAT and Lewis E. Simons, of Edenburg, in the county of Clarion and State of Pennsylvania, have invented a new and Improved Rock-Washer for Oil-Wells, of which the following is a specification:

Figure 1 is a longitudinal section of our improved rock-washer. Fig. 2 is a transverse section taken on line x x in Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

The object of our invention is to provide a means of keeping open the apertures in the well-tubing through which oil issues for the purpose of washing the rock and preventing the accumulation of paraffine.

The invention consists in a spring carrying a pin, which projects through the aperture in the well-tubing, and in the combination therewith of a ball or enlargement on the valverod, which engages the spring and causes the pin to make an outward movement for each stroke of the valve-rod.

Referring to the drawing, A is the upper end of a working-barrel, and B is a short section of tube connected with it by means of the thimble C, and in a similar manner with the well-tubing.

In one side of the tube B there is an aperture, a, through which projects a pin, b, which is attached to the middle of the bow-spring c.

The spring e is attached to the inner surface of the tube, at one of its ends, by means of a rivet, while the other end is free to slide.

Upon the valve-rod D, which moves through the tube B, is placed a ball, E, which is of sufficient diameter to strike the back of the spring c at every stroke of the pump, and thus move the pin b in the hole a, and by this means constantly free the hole of paraffine and other obstructions, so that enough oil constantly escapes to prevent the accumulation of paraffine in the crevices of the rock.

In practice, the tube B will have a strengthening rib or flange around each end, and the spring e will be in a recess formed in the side of the tube.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

- 1. The combination, in oil-pumping apparatus, of the spring-supported pin b and the ball E, substantially as herein shown and described.
- 2. The combination of the tube B, having the aperture a, the spring c, carrying the pin b, and means for moving the said spring, substantially as shown and described.

FRANK JEANNERAT. LEWIS EDWARD SIMONS.

Witnesses:

G. M. CUSHING, H. F. WHITING.