I. La FOY & J. SIGLIN.
Well-Packing.

No. 218,282. Patented Aug. 5, 1879.

Fig. 1.

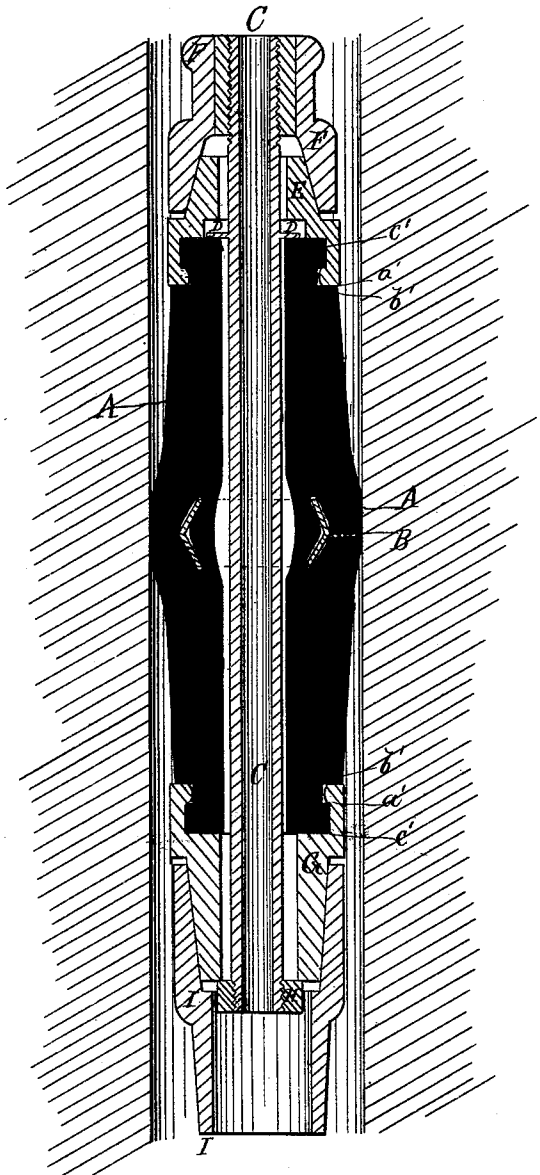


Fig. 2.

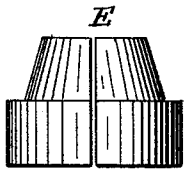


Fig. 3.

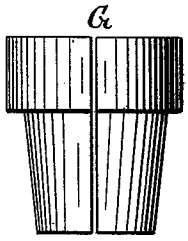
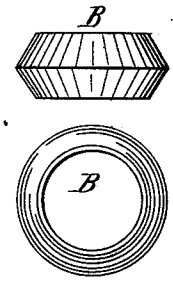


Fig. 4.



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UNITED STATES PATENT OFFICE.

ISAAC LA FOY AND JESSE SIGLIN, OF BRADFORD, PENNSYLVANIA.

IMPROVEMENT IN WELL-PACKINGS.

Specification forming part of Letters Patent No. **218,282**, dated August 5, 1879; application filed May 14, 1879.

To all whom it may concern:

Be it known that we, ISAAC LA FOY and JESSE SIGLIN, of Bradford, in the county of McKean and State of Pennsylvania, have invented a new and Improved Oil-Well Packing, of which the following is a specification.

Figure 1 is a vertical sectional elevation of the device. Fig. 2 is an elevation of the upper clamp. Fig. 3 is an elevation of the lower clamp. Fig. 4 represents an elevation and plan of the metallic ring.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide a device for the more efficient packing of oil-wells, in order to confine their gases and cause them to flow.

The invention consists of the tubular packing A, of rubber or other elastic material, molded around a metallic ring, B, that occupies a central position in it, whose shape is that of two frustums of a cone united at their bases. The ends of this rubber tube are of less diameter than its body, and around each of them is a deep annular groove, *a'*, that produces the shoulders *b' b'* and the collars *c' c'*. This tube is set over a small iron tube, C, on each end of which a screw-thread is cut, and which is provided with a collar, D, fixed near its upper end.

The split tapering clamp E, whose inner surface is grooved to fit over the collar D and one of the collars *c'*, is then set in place, when the tip or thimble F, that is furnished with an internal screw-thread, is screwed tightly down on the tube C over the clamp E, drawing its two parts together in such a manner that they firmly hold the upper end of the elastic packing-tube. A like split clamp, G, though it may be a little longer, is fitted over the lower end of the elastic tube, and held from slipping from the tube C by the nut H. This clamp is tightened upon the elastic tube by the sleeve I, which may be screwed or driven upon it.

When this completed packing is set in a well tube, pressure from below and the weight of the tubing above press together the movable parts, so that the elastic tube A spreads out and fills the well-tube, making an impervious packing.

The ring B inclines the tube A to expand most at that point, and also makes it more rigid and unyielding for packing purposes.

The ends of the elastic tube are shaped as shown, and corresponding shapes given to the split clamps, in order that a firm hold may be had upon the said tube when it is desirable to detach it from the walls of a well-tube.

This device makes a more effective oil-well packing than any with which we are acquainted.

We are aware that it is not new to use a packer with central cavity, and expanded by fastenings secured to each end; but

What we claim as new and of our invention is—

1. The within-described oil-well packing, consisting of elastic tube A, containing ring B, and provided with grooves *a' a'*, shoulders *b' b'*, and collars *c' c'*, in combination with split clamps E and G and thimbles or sleeves F and I, all secured upon the tube C, which is provided with a collar, D, substantially as herein shown and described.

2. The combination of elastic tube A and ring B, substantially as herein shown and described.

3. In the construction of an oil-well packing, the tapering split clamps and the sleeves or thimbles fitting over them, for the purpose of holding the elastic packing, substantially as herein shown and described.

ISAAC LA FOY.
JESSE SIGLIN.

Witnesses:
A. J. CURTIS,
J. C. STURGEON.