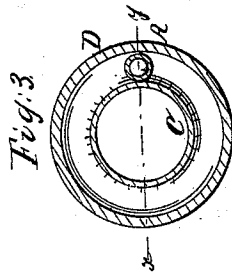
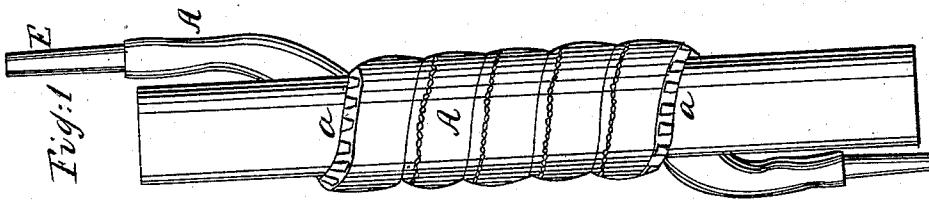
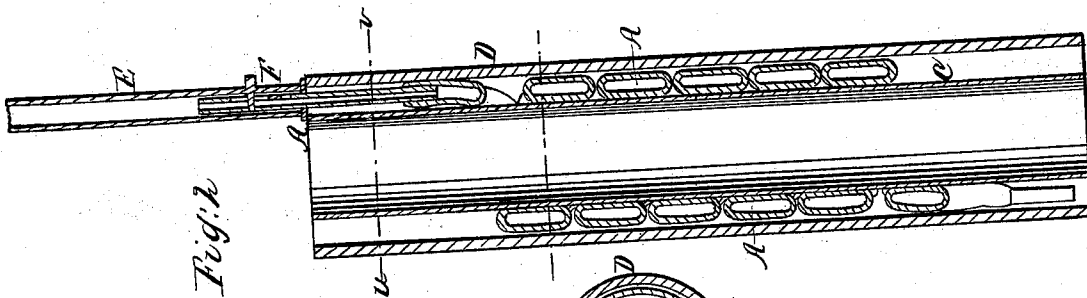


J. J. Parker,

Well Packing,

N^o 58,469.

Patented Oct. 2, 1866.



Witnesses

Gilbert B. Lowe
Edward Griever

Inventor

J. J. Parker by his

Attorney

Geo. E. Brown

UNITED STATES PATENT OFFICE.

J. J. PARKER, OF MARIETTA, OHIO.

IMPROVEMENT IN WELL-PACKINGS.

Specification forming part of Letters Patent No. **58,469**, dated October 2, 1866.

To all whom it may concern:

Be it known that I, J. J. PARKER, of Marietta, county of Washington, in the State of Ohio, have invented a new and useful Spirally-Coiled Well-Packing; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a view in perspective. Fig. 2 is a vertical section; and Fig. 3 is a transverse section.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

This invention consists in securing to the exterior of the pump-tube in a deep well a coil of flexible pipe, which is to be filled with air or water, as occasion may require, and thus made to close entirely the space between the pump and well-tubing.

A represents the flexible pipe, consisting of gum, leather, or other suitable material wrapped spirally around a cylindrical metallic case, B, (shown in transverse section at Fig. 3,) thirty or forty inches in length, and of a diameter sufficient to enable it to be slipped easily over the joints of the pump-tube C. The flexible pipe is secured to the said metallic case by bending the ends of the case over the upper and lower rounds of the tubing, as shown at *a*, Fig. 1, by rivets or by ferrules.

The metallic case is not closed longitudinally, but left open, so as to be elastic and close tightly to the pump-tubing when the flexible pipe is filled with air or water, but spring open again when relieved of the pressure. It is lined with leather or other suitable

material, *b*, to form a water-tight packing between it and the pump-tube. To the upper end of the flexible pipe a connection is fastened for the attachment of a supply-pipe, E, in which is arranged a waste-valve, F, and to the lower end of the flexible pipe a similar connection may be fastened for the attachment of a second coil of packing.

The operation is as follows: The case B, with the tubing A attached, as above described, is slipped over the upper end of the pump-tube C, let down to any desired place, and held there by means of a cord attached in any convenient manner. Air or water is then introduced through the supply-pipe E, so as to produce any required pressure; and the flexible tubing A is thereby expanded until it fills perfectly the space between the pump-tubing and the walls of the well. To relieve the pressure, the supply-pipe E is raised, which opens the valve F in its upward motion, through which the air or water rushes, allowing the pipe to collapse, when the apparatus may be moved as desired.

In this way the hydraulic pressure is so distributed that any amount of it may be brought to bear without danger of bursting the packing.

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

The tube A, in combination with the expandible metal case B and lining C, all substantially in the manner and for the purpose described.

This specification signed and witnessed this 23d day of February, A. D. 1866.

J. J. PARKER.

Witnesses:

A. BLOODGOOD,
GEO. PARKER.