

H. RIESEL.
Hydraulic-Packing.

No. 219,309

Patented Sept. 2, 1879.

Fig. 1.

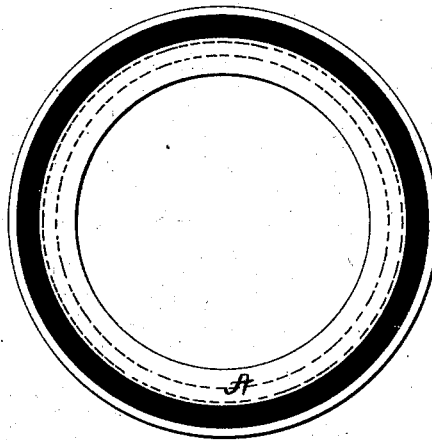


Fig. 2.

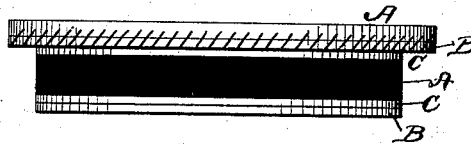
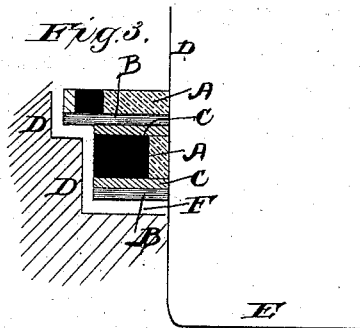


Fig. 3.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

HENRY RIESEL, OF GALVESTON, TEXAS.

IMPROVEMENT IN HYDRAULIC PACKINGS.

Specification forming part of Letters Patent No. **219,309**, dated September 2, 1879; application filed April 23, 1879.

To all whom it may concern:

Be it known that I, HENRY RIESEL, of Galveston, in the county of Galveston, and in the State of Texas, have invented certain new and useful Improvements in Hydraulic Packings; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of a packing for hydraulic rams, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view, and Fig. 2 a side view, of my improved packing. Fig. 3 is a section of the packing, showing its application to a ram.

My improved packing is composed of layers of different materials, as follows: At the top is a layer, A, of what is known as "Tuck's packing." Next comes a layer, B, of leather, then a layer, C, of metallic lead. After this comes another layer, A, of Tuck's packing, a layer, C, of lead, and a layer, B, of leather.

The lines D represent the outlines of the groove turned in the cylinder to receive the packing, and the lines E represent the outlines

of the ram or plunger. Between the walls of the groove in the cylinder and the outside surface of the packing is a water-space, F.

The pressure being underneath the plunger E, the water-power in the space F, in which the same amount of pressure accumulates, exerts its force against the packing, thereby forcing it against the plunger with a force equal to the pressure carried in the cylinder, and thereby the friction due to that force causes the packing to wear the plunger, and also wear itself away very rapidly.

By the combination of the materials above described the friction is materially lessened; consequently less power is required than with the ordinary packing. The different layers of the packing may be sewed or otherwise suitably secured together.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A packing for hydraulic rams, consisting of layers of Tuck's packing, leather, and metallic lead, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of March, 1879.

HENRY RIESEL.

Witnesses:

GEO. A. STARKEY,
WM. R. JOHNSON.