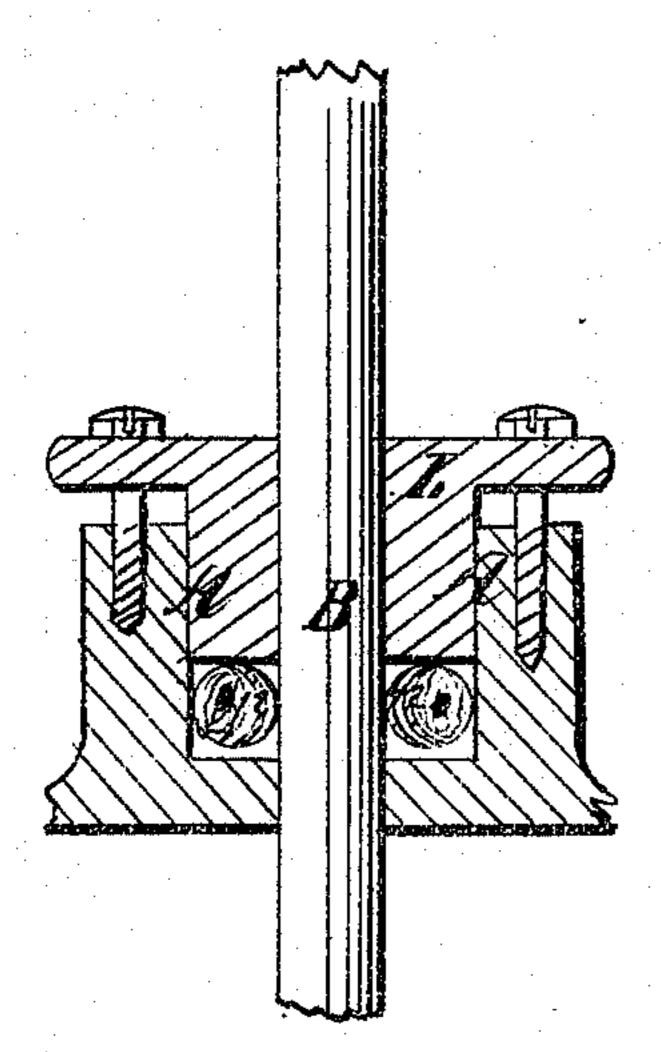
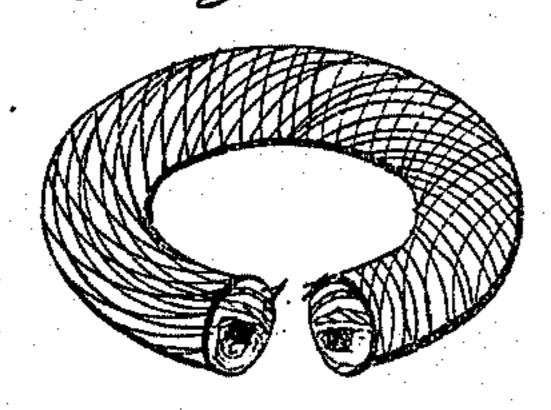
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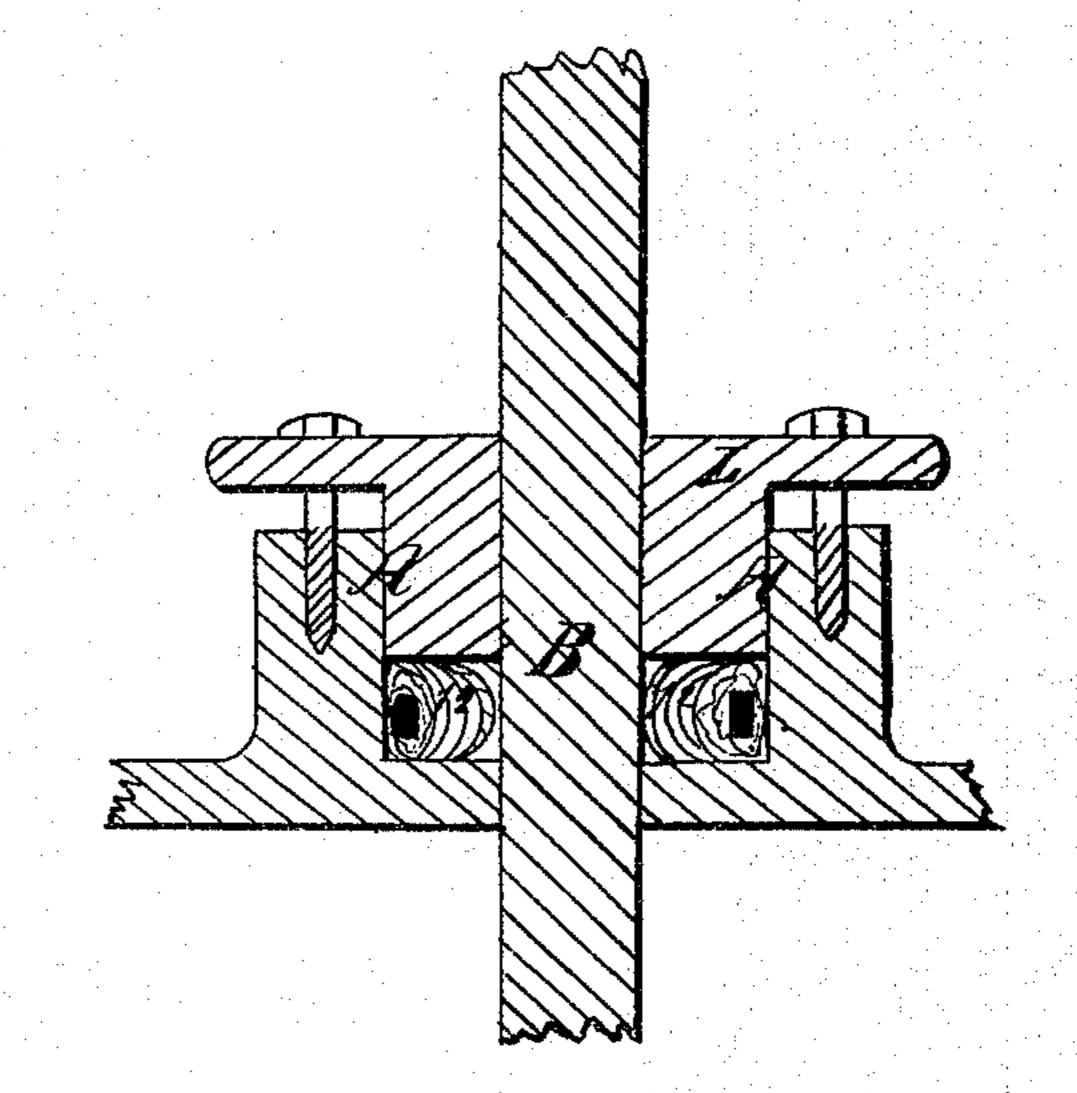
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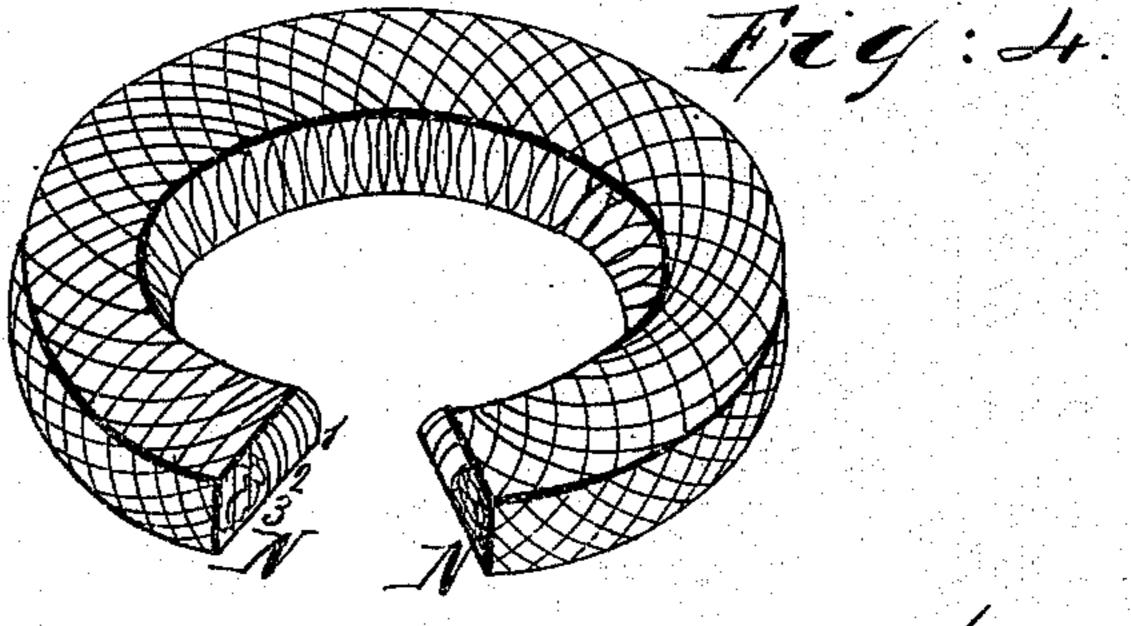


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Thet nesses: John burtes. Andwew Mackey





Inventor James Ill: Sean John Landerear

# Anited States Patent Pffice.

#### IMPROVEMENT IN PISTON-ROD PACKING.

## JAMES P. McLEAN AND JOHN VANDERCAR, OF BROOKLYN, NEW YORK, ASSIGNORS TO JAMES P. McLEAN.

Letters Patent No. 59,918, dated November 20, 1866.

#### SPECIFICATION.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that we, James P. McLean and John Vandercar, of the city of Brooklyn, in the county of Kings, and State of New York, have invented a new and useful improvement in the construction of packing for piston rods, or other shafting, for steam or other engines, and we hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which are lettered to correspond with and form a part of the specification. In order that the public may fully understand our invention, and those skilled in the mechanic arts be enabled to construct and use the same, we will describe it as follows, to wit:

Figures 1 and 2, letters A A, are stuffing boxes, for a steam engine, having our improved packing, 1, 2, secured in the boxes around the piston rod, B B.

Figure 3 is a perspective drawing of a piece of cylindric packing, formed of cork and leaden strips, with canvas jacket.

Figure 4 is a perspective drawing of a flat packing, constructed of cork, lead, and canvas.

Our invention consists in the introduction and use of cork, N N, and leaden strips, 1, 2, 3, in the stuffing boxes of steam or other engines; also for bearings for shafting, in such a manner that the leaden strips, 1, 2, 3, will be forced against the piston-rod, shaft, or cylinder, by the expansion of the cork, N N, fig. 4, which becomes charged with the lubricating matter, or oil, so that it forms a lubricating packing of itself if necessary; and on account of its great expansive properties when brought in contact with steam, or moisture, very little attention is necessary to be paid to the gland or follower, L. The superiority of cork and leaden strips over the packing that is in common use, is that they are not injuriously affected by steam, and do not burn on the piston-rod, as is the case with other materials that are in common use. The introduction of cork, back of of the lead, as shown at fig. 4, has the desirable effect to hold the lead in contact with the rod, or shaft, B B, by its own expansion, caused by the steam, thereby rendering the screwing up of the stuffing-box almost unnecessary. We are aware that copper has been used for steam packing, and that lead has been employed for such purposes separately; the former has an injurious effect upon the piston-rod, by scratching the same, while the lead alone requires constant adjusting of the gland or follower, but the application of sheet lead as above set forth and shown at figs. 1, 2, 3, 4, we believe to be new and useful.

Therefore, what we claim as new and useful, and what we wish to secure by Letters Patent of the United

States of America, is—

The combination of the cork N N, and leaden strips 1, 2, 3, for the purposes substantially as described, and shown in the drawings.

In testimony whereof we hereunto subscribe our names, in the presence of two witnesses.

JAMES P. McLEAN, JOHN VANDERCAR.

Witnesses:

JOHN CURTIS, ANDREW MACKY.