

(No Model.)

S. D. MARTIN.
PISTON ROD PACKING.

No. 453,493.

Patented June 2, 1891.

Fig. 1.

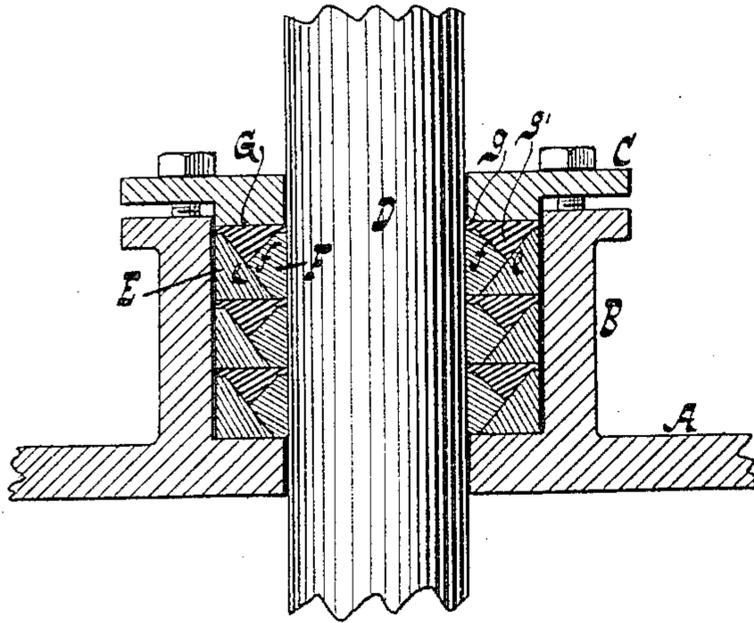


Fig. 2.

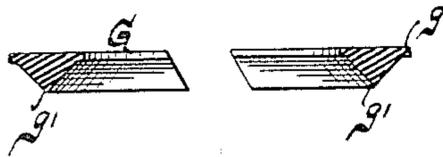


Fig. 3.

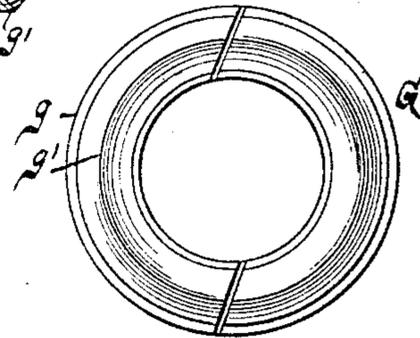


Fig. 7.

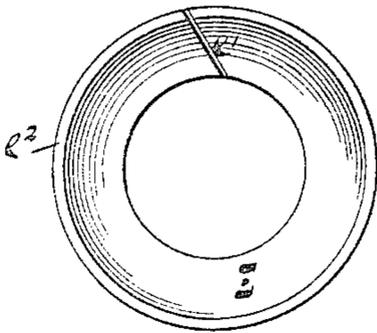


Fig. 4.



Fig. 5.

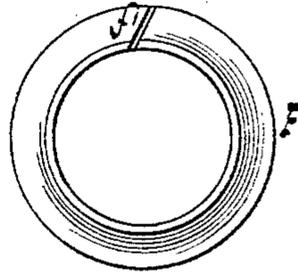
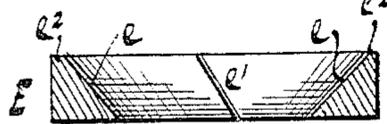


Fig. 6.



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PISTON-ROD PACKING.

SPECIFICATION forming part of Letters Patent No. 453,493, dated June 2, 1891.

Application filed September 25, 1890. Serial No. 366,120½. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN D. MARTIN, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Piston-Rod Packings, of which the following is a specification.

This invention relates to a packing composed of a compressible outside split ring with a beveled inside edge, a compressible inside split ring, with a Λ -shaped outside edge, and a metallic ring composed of a flat plate and a V -shaped annular ridge formed on or secured to the flat plate, as pointed out in the following specification and claim, and illustrated in the accompanying drawings, in which—

Figure 1 represents a section of a stuffing-box provided with my packing. Fig. 2 is a detached section of the metallic ring. Fig. 3 is an inverted plan of the same. Fig. 4 is a detached section of the inside ring. Fig. 5 is a plan of the same. Fig. 6 is a detached section of the outside ring. Fig. 7 is a plan of the same.

The cylinder-head A, the stuffing-box B, the gland C, and the piston-rod D are of the usual well-known construction. E is the outside ring, which is made of hemp and rubber or of any other suitable compressible and elastic material. The said ring is split by providing it with an oblique cut e' , Fig. 7, and its inner edge e is oblique or beveled, leaving a flat portion e^2 on its upper face, as shown in Fig. 6.

F is the inside ring, which is also made of a compressible and elastic material and provided with an oblique cut f' . (See Fig. 5.) The periphery of this ring is Λ -shaped, as shown at f in Fig. 4. When the ring F is placed into the ring E, the lower portion of

its Λ -shaped edge bears upon the beveled inner edge e of the outside ring E, leaving a V -shaped annular cavity $f e$, Fig. 1.

G is a metallic ring, which is made in two halves, Fig. 3, and composed of a flat plate or flange g , from the inner face of which projects a V -shaped ridge g' , which fits the V -shaped annular cavity $e f$, formed by the compressible rings E F. If pressure is applied to the packing, the ridge g' forces the inside ring F downward and inward, and by the combined action of the ridge g' and of the inside ring F the outside ring E is forced downward and outward, so that a tight joint is formed on the inside of the packing, as well as on its outside.

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

The combination, in a packing for piston-rods and the like, of the inner compressible and elastic split ring F, resting against the rod and having a V -shaped periphery f , the outer compressible and elastic split ring E, resting against the stuffing-box and having the top surface e^2 and inner beveled surface e , against which bears the lower side of the V -shaped periphery of the inner ring, and the divided metallic ring G, comprising the plate g , resting on the upper sides of the inner and outer rings and having the pendent V -shaped ridge g' , bearing against the beveled inner surface of the outer ring and the upper surface of the V -shaped periphery of the inner ring, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

STEPHEN D. MARTIN.

Witnesses:

J. VAN SANTVOORD,
E. F. KASTENHUBER.