

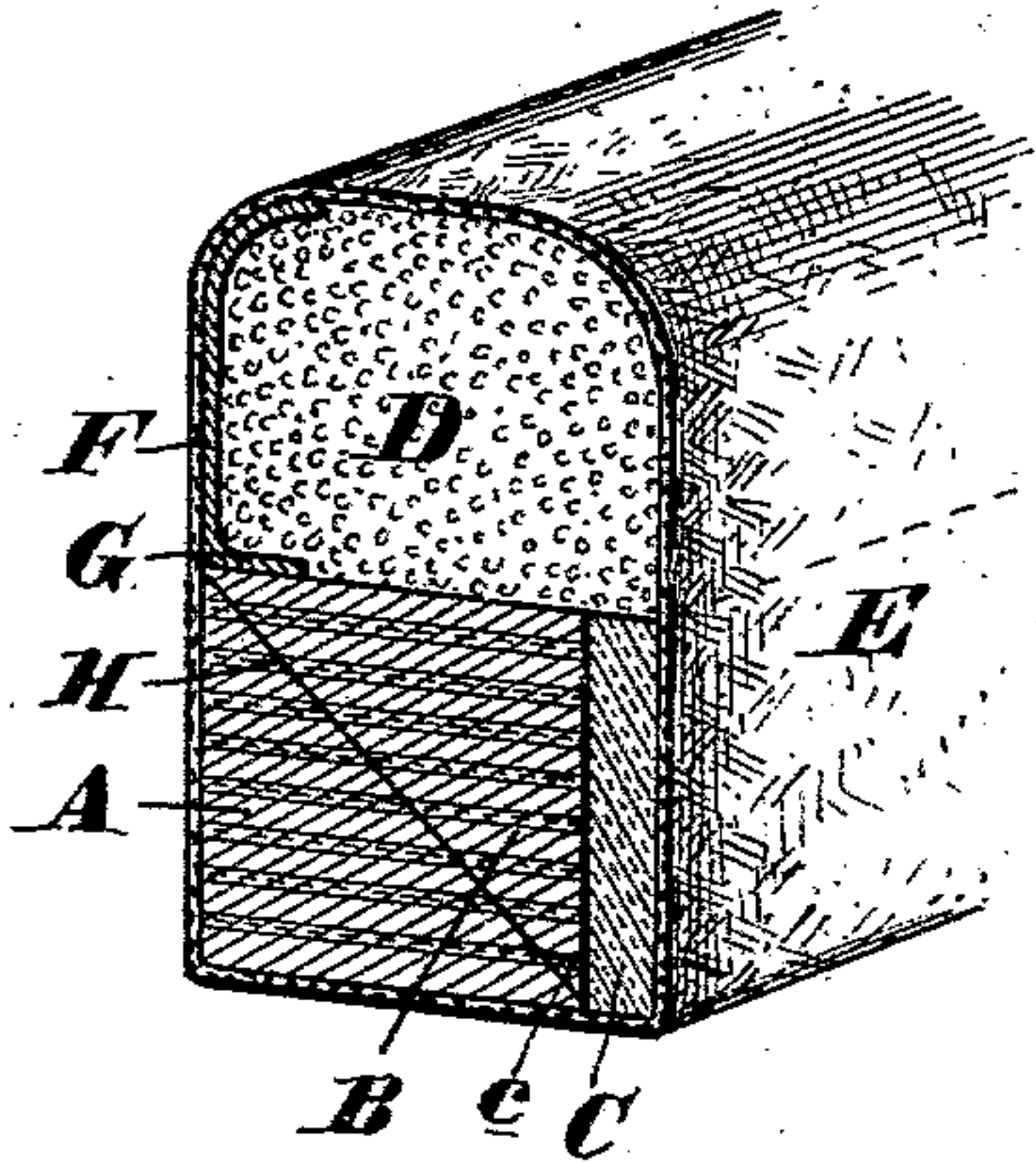
No. 716,737.

Patented Dec. 23, 1902.

M. MONTGOMERY.
PISTON PACKING.

(Application filed Apr. 26, 1902.)

(No Model.)



Attest
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UNITED STATES PATENT OFFICE.

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PISTON-PACKING.

SPECIFICATION forming part of Letters Patent No. 716,737, dated December 23, 1902.

Application filed April 26, 1902. Serial No. 104,890. (No specimens.)

To all whom it may concern:

Be it known that I, MARSHALL MONTGOMERY, of the city and county of Philadelphia, State of Pennsylvania, have invented an Improvement in Piston-Packing, of which the following is a specification.

My invention has reference to piston-packing; and it consists of certain improvements, all of which are fully set forth in the following specification and shown in the accompanying drawing, which forms a part thereof.

The object of my invention is to provide a durable form of packing which shall be self-adjusting, so as to adapt itself to various conditions of use and compensate for wear.

My invention will be better understood by reference to the drawing, in which is shown a perspective view of a piston-packing embodying my invention.

A and B are two strips of rubber and cloth, triangular in cross-section and fitted together on their diagonal surfaces to form a strand substantially rectangular in cross-section and divided diagonally. In these parts the layers of cloth and rubber are horizontal or transverse to the diagonal line of division H, so as to present the series of cloth and rubber edges to the piston-rod.

To one side of the triangular part B is arranged a rectangular strip of rubber C, preferably cemented in place at c. Above the rubber and cloth packing parts above described I arrange the soft packing-strand D, of cotton or other suitable textile fiber, and the whole is inclosed in a textile sheath, which may be plaited or otherwise formed. This holds the several parts in normally proper relative position. The soft packing D holds the lubricant necessary, and the heavy wear comes upon the part A, which is next the piston-rod. The packing D also acts as a cushion between the successive layers of rubber packing. To prevent rapid wear of the soft threads of the strand D, I may provide an extra textile layer F upon the side next to the piston-rod and arranged between the strand D and the outer sheath E. The lower edge G of this cloth is turned under,

so that the upward thrust of the edge of the part B will not displace it or allow its edge to be torn by the moving piston-rod. The strand D and covering E may be saturated with oils, waxes, or plumbago, or combinations of these. The rubber C being on the side farthest from the piston-rod acts as an elastic cushion to constantly force the rubber and cloth packing A against the piston-rod, and being away from the heat and abrading-surface of the piston-rod it is not injured. This rubber acts automatically to cause the packing A to constantly fit tight to the piston-rod and compensate for wear and obviates the necessity of frequently compressing the packing in a direction parallel to the length of the piston-rod, as was heretofore necessary in piston-packings of this general character.

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

1. A piston-packing consisting of a rectangular strand of rubber and cloth divided diagonally throughout its length, a longitudinal thin strip of soft rubber arranged upon one side of the cloth and rubber strand and of a height equal to the height of the cloth and rubber strand, a soft textile strand arranged upon one of the faces of the cloth and rubber strand and at one end of the soft-rubber strip and of a width equal to the combined width of the cloth and rubber strand and soft-rubber strip, and an inclosing textile sheath binding the several parts in relative position.

2. A piston-packing consisting of a rectangular strand of rubber and cloth divided diagonally throughout its length, and a thin longitudinal strip of soft rubber secured to one face of the divided rectangular strand and of a height equal to the height of the rubber and cloth strand.

In testimony of which invention I have hereunto set my hand.

MARSHALL MONTGOMERY.

Witnesses:

WM. N. SHRYOCK,

ARTHUR N. BLACKBURN.