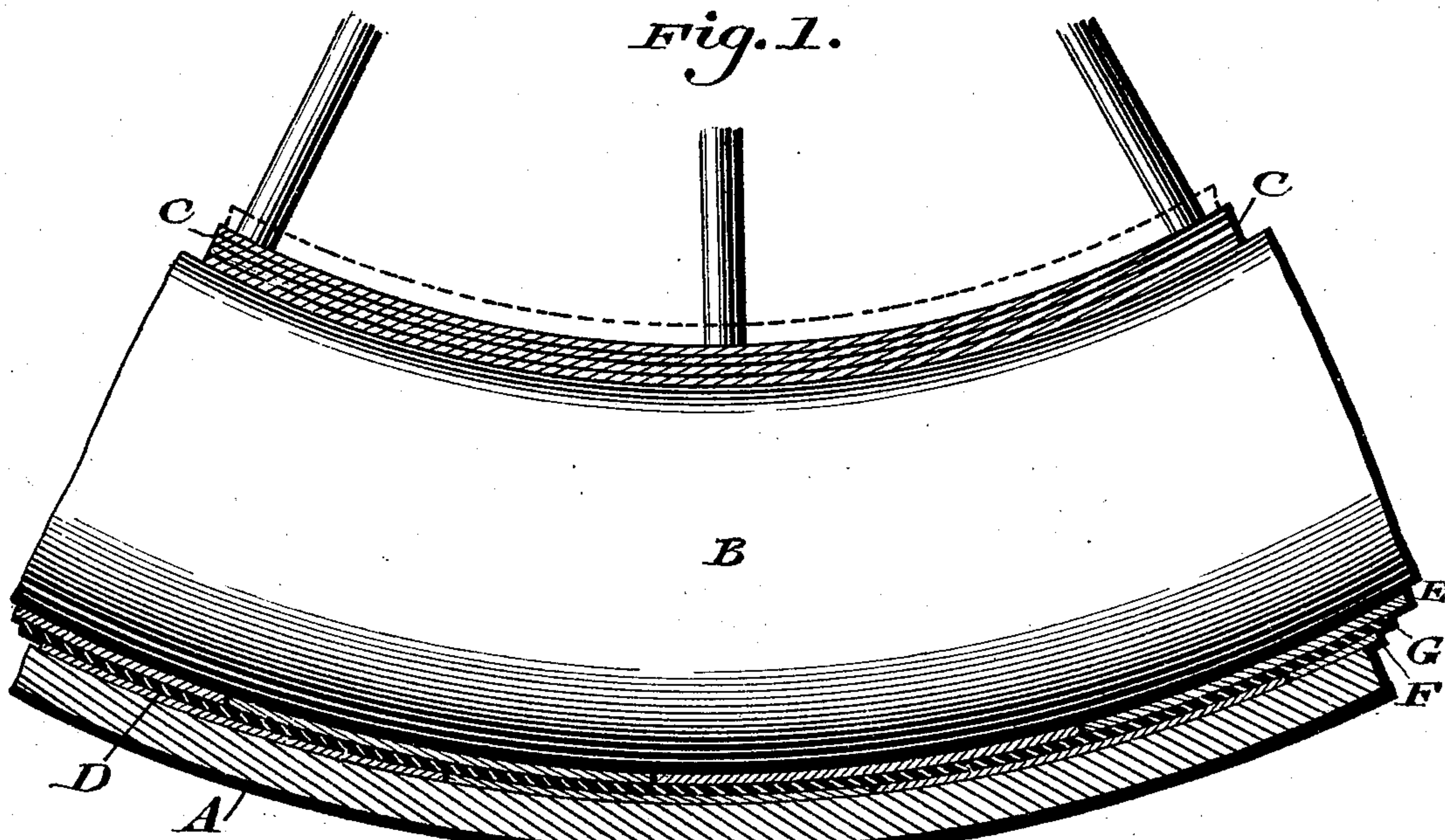
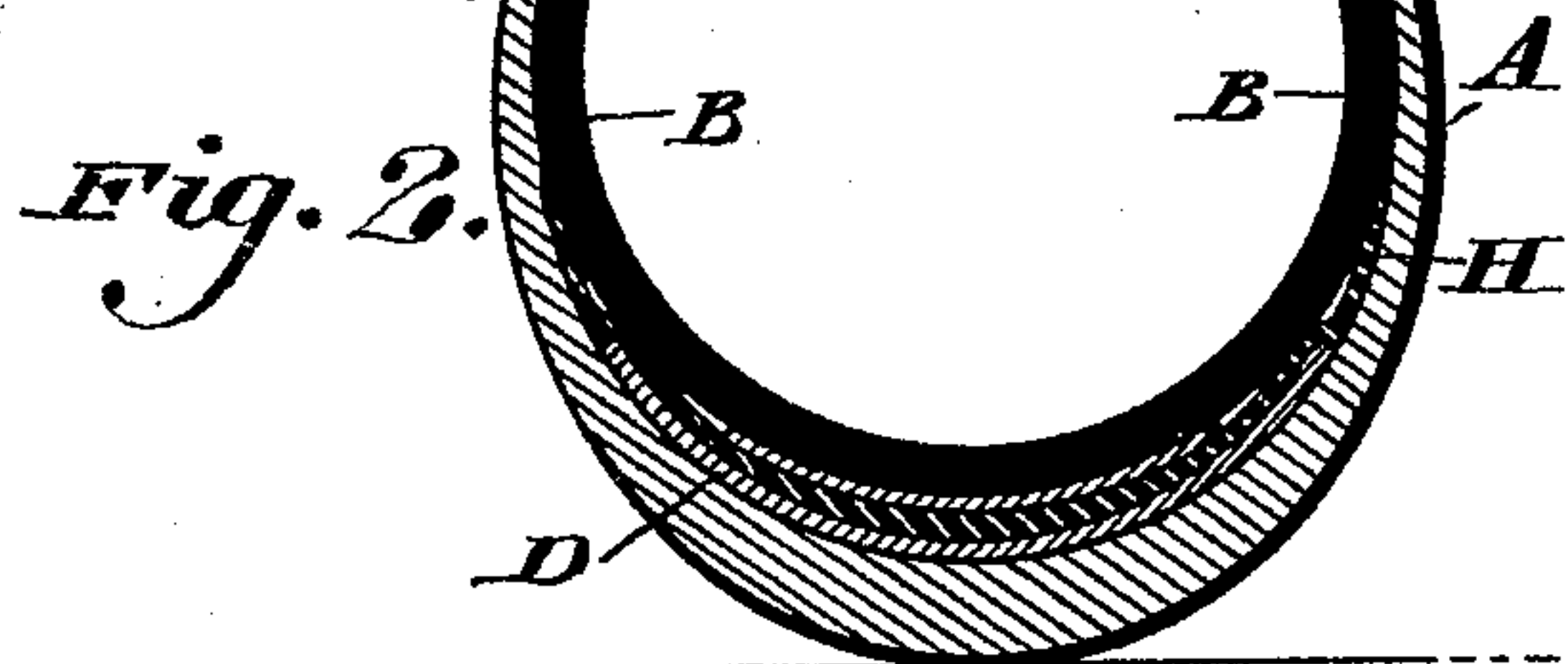
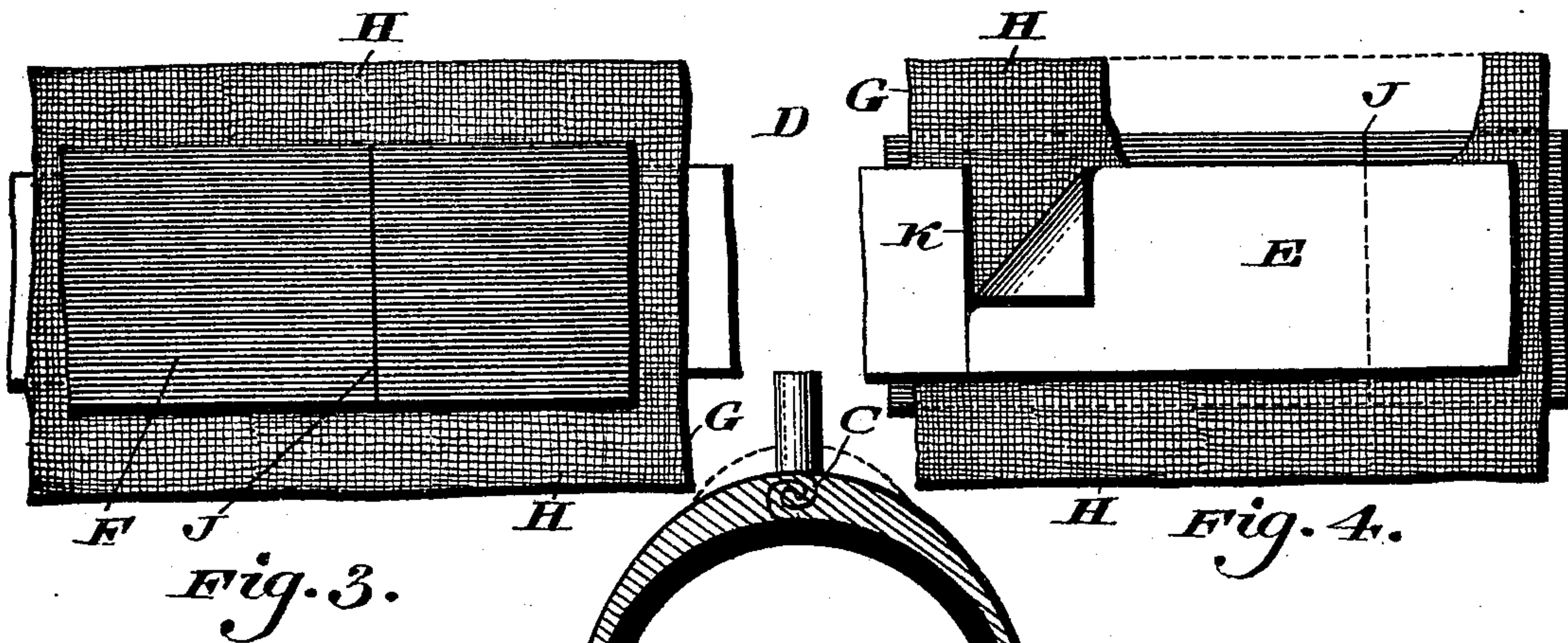


(No Model.)

R. B. LAMB.
BICYCLE TIRE.

No. 579,879.

Patented Mar. 30, 1897.



WITNESSES:

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UNITED STATES PATENT OFFICE.

RESTORE B. LAMB, OF CAMDEN, NEW JERSEY.

BICYCLE-TIRE.

SPECIFICATION forming part of Letters Patent No. 579,879, dated March 30, 1897.

Application filed June 24, 1896. Serial No. 596,673. (No model.)

To all whom it may concern:

Be it known that I, RESTORE B. LAMB, a citizen of the United States, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Improvement in Bicycle-Tires, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists in the construction of a guard or means for preventing the puncturing of the pneumatic tube of a bicycle-tire both at the solid parts and joints of said means, as will be hereinafter set forth, and pointed out in the claims that follow the specification.

Figure 1 represents a longitudinal section of a bicycle-tire embodying my invention. Fig. 2 represents a transverse section thereof. Figs. 3 and 4 represent views of opposite faces of the guard. Fig. 5 represents a transverse section of the guard, the parts being separated.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates the outer tube of a bicycle-tire, and B designates the inner tube thereof, said outer tube being divided, so that it may be opened when desired, and provided at the ends thereof with tongues C for interlocking the same.

Interposed between the tubes at what may be termed the "tread portion" thereof is a guard D for preventing puncturing of the inner tube, the same consisting of the strips E and F, of leather, integument, or other tough material, and the pieces G, of fabric, said strips E and F being on opposite sides of said piece G and secured thereto by cementing or otherwise, more particularly at their ends, said pieces being wider than the strips, so that its ends H may be cemented, gummed, or otherwise properly secured to the inner face of the tube A, thus preventing slipping or shifting of the guard from its position.

The strips E and F have their joints broken on opposite sides of the piece G, as at J K, so that each joint is backed by the solid material of the opposite strip, whereby, should a tack or other article pass through a joint, it will be resisted by said solid material, it being noticed that the guard presents effective means for preventing the puncturing of the

inner tube without materially adding to the thickness and weight of the tire.

The strips are sufficiently wide to guard the parts of the tube exposed to piercing or puncturing, and the guard is not prevented from bending to accord with the curvature of the tire in longitudinal and transverse directions. Moreover, the guard is of a highly-flexible nature and does not impart rigidity to the tire nor materially affect the resiliency of the same. It is also uniform in thickness throughout its length and may be bent either way, as it is two-faced or reversible, and when it is stretched and placed in position the ends of the strip lie flat on the piece G and abut or are closed, so that there is no penetrating space between them, and there is, furthermore, no overlapping or formation of humps, whereby the uniformity in thickness of the guard and the continuity of surfaces of the strips on both faces are preserved.

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

1. A non-puncturing guard for a bicycle-tire consisting of the strips E and F of tough material and the piece G of fabric, said strips being on opposite sides of said piece, the latter having its sides extended beyond the edges of said strips forming the attaching ends H, the joints of said strips being broken on opposite sides, and the adjacent edges of the strips abutting forming a continuity of the strips on both faces and a uniform thickness of the guard throughout the length of the same.

2. A bicycle-tire consisting of outer and inner tubes, the piece G of fabric with its sides secured to said tubes, and strips E and F of tough material secured to said strip on opposite sides thereof, the joints of said strips being broken on opposite faces the edges of adjacent strips abutting forming a continuity of the strips on both faces and a uniform thickness of the guard throughout the length of the same.

RESTORE B. LAMB.

Witnesses:

JOHN A. WIEDERSHEIM,
M. G. LUKENS.