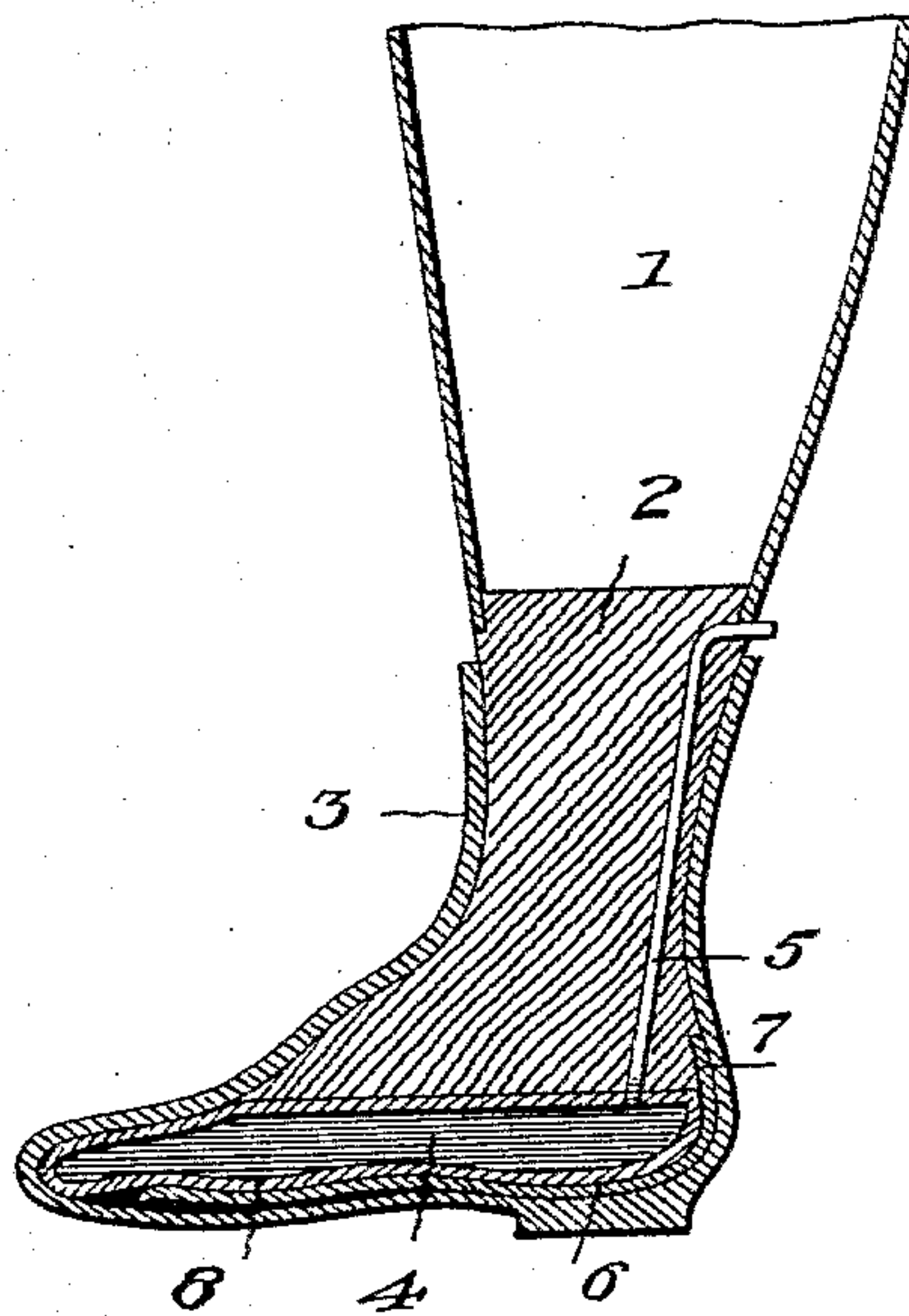


(No Model.)

W. ROBERTS.  
PNEUMATIC FOOT.

No. 589,537.

Patented Sept. 7, 1897.



Witnesses

*Wm. C. Ashieen*  
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# UNITED STATES PATENT OFFICE.

WILLIAM ROBERTS, OF PLYMOUTH, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO MORGAN BEVAN, OF SAME PLACE.

## PNEUMATIC FOOT.

SPECIFICATION forming part of Letters Patent No. 589,537, dated September 7, 1897.

Application filed January 9, 1897. Serial No. 618,626. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM ROBERTS, a citizen of the United States, residing at Plymouth, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in a Pneumatic Foot; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an artificial foot; and the object is to provide a foot which shall be simple in construction, durable in use, and comparatively inexpensive of production.

To this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

The figure in the drawing is a longitudinal section of an artificial pneumatic foot embodying my invention.

1 represents the socket which receives the stump, and the lower end of said socket terminates in a block 2, approximating in shape the upper portion of the human foot, and it is neatly encompassed by the shoe 3, leaving a horizontal chamber between the bottom of the block and the insole of the shoe.

4 represents a pneumatic sole which completely fills this chamber, and said sole is formed with an inflating-tube 5, which passes up through the block 2, its outer end terminating at a suitable point above the upper

edge of the shoe, where it is provided with the usual socket connection and check-valve, through the medium of which the pneumatic sole is inflated similar to the pneumatic tire of the ordinary bicycle.

6 represents a leaf-spring, the vertical arm 7 of which is permanently fixed to the block, and its horizontal arm 8 extends along the inside of the shoe between the insole and the lower face of the pneumatic sole. This spring allows the foot to bend in the act of walking and restores it to the natural position after it has been raised from the ground.

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

An artificial foot, comprising the socket 1, the block 2 secured in the lower end thereof, in combination with the pneumatic sole 4 provided with the inflating-tube 5 extending vertically upward through said block 2, and the leaf-spring 6 having its vertical arm 7 permanently fixed to said block, and its integral horizontal arm 8 extending around the heel portion of the block and pneumatic sole and underneath and parallel with said sole, substantially as shown and described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

WILLIAM ROBERTS.

Witnesses:

MORGAN H. WALTERS,  
EVAN L. JONES.