

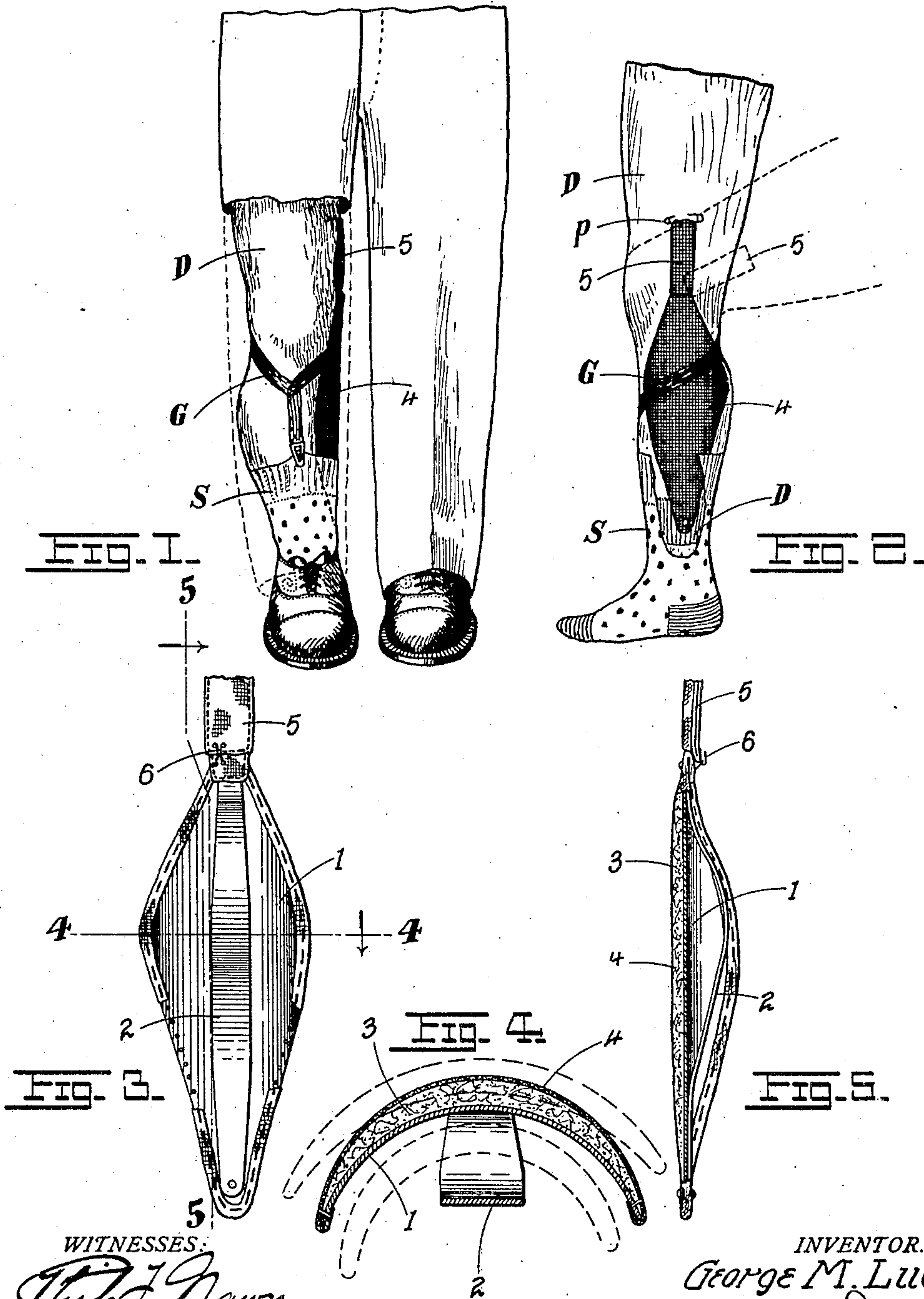
No. 843,221.

PATENTED FEB. 5, 1907.

G. M. LUCE.

LEG FORM.

APPLICATION FILED JULY 9, 1906.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## LEG-FORM.

No. 843,221.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed July 9, 1906. Serial No. 325,361.

*To all whom it may concern:*

Be it known that I, GEORGE M. LUCE, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Leg-Forms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in leg-forms; and it consists in the novel construction of form more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a front elevation of a pair of bow-legs, the trouser-leg on one leg being broken away to show the application of my invention. Fig. 2 is an inner face view, the sock being partly broken away.

Fig. 3 is an inside elevation of the invention. Fig. 4 is a cross-section on line 4 4 of Fig. 3, and Fig. 5 is a longitudinal vertical section on the broken line 5 5 of Fig. 3.

The object of my invention is to provide a form for bow-legs which will entirely eliminate the deformity, one which can be worn with a minimum degree of discomfort, one which will afford a maximum amount of ventilation, one which will in no wise interfere with the circulation, one which can be readily applied, one which requires a minimum amount of repair, one which can be readily adjusted to the calf of the leg, one which is light, cheap, durable, and one possessing further and other advantages better apparent from a detailed description of the invention, which is as follows:

Referring to the drawings, 1 represents an oblong outwardly-convexed bowed member (preferably a sheet-metal plate) having tapering ends, the medial portions thereof being the widest and conforming in curvature to the deformed calf of the leg and as a complementary member to such deformed calf makes with the latter a normally shaped leg. The convexed form of the said member leaves an air-space between it and the leg, so that the latter is kept free from perspiration, the air having more or less freedom to circulate, the consequent ventilation keeping the leg cool. To afford a yielding bearing against the calf, the said bowed member has secured thereto on the inner side a yielding or elastic longitudinally-disposed bridge-piece 2, whose opposite ends are riveted to said member 1. The outer face of the member 1 is covered

with a layer or cushion of cotton 3 (or equivalent filler) and finally protected by an outer covering of cotton, silk, or equivalent layer 4, whose edges are turned inward and over the edges of the member 1 and sewed thereto. In applying the form the same is placed over the deformed leg, the lower (and comparatively longer) tapering end being passed inside the sock S, after which the garter G serves in a measure to hold the form in place.

In order that there may be no distinct line of demarcation visible on the outside of the trouser-leg and that such trouser-leg may gradually merge and conform to the shape of the member 1, the latter is provided with a padded extension or cushion 5, fastened by a safety-pin *p* to the drawers D and hinged at the base of its rear edge to the upper end of the member 1, the connection being preferably made by a hook and eye 6, Fig. 3. This specific connection allows the knee to bend, Fig. 2, without discomfort, and when the limb is straightened out there is no wrinkling or buckling of the material at the joint aforesaid. The member 1 being yielding may be bent outwardly or flattened to a greater or less degree, (see dotted positions, Fig. 4,) depending on the conformation of the calf to which it is to be applied, without in any wise injuring the form, so that the device becomes thoroughly adjustable. The bridge-piece 2 has a gradual curvature, so that it affords a maximum bearing-surface for the leg and does not irritate the leg on that account. The edges of the member 1 are contoured so as to fit the majority of deformed legs, and when once applied to the leg the form gives the leg a perfect outline and the bow in the leg cannot be detected. Obviously the only place of contact with the leg is along the edges of the member 1, so that there is no danger of perspiration. There is no liability of a local increased temperature, and the device may be worn with the least degree of inconvenience.

Having described my invention, what I claim is—

1. A form for bow-legs comprising a longitudinal outwardly-convexed member having tapering ends, and contacting with the leg only along the edges of the member whereby a layer of air is interposed between said member and leg, substantially as set forth.

2. A form for bow-legs comprising a longitudinal outwardly-convexed member having tapering ends and an inner bent longitudinal



bridge-piece bearing against the leg, substantially as set forth.

3. A form for bow-legs comprising a longitudinal outwardly-convexed member having  
5 tapering ends, an inner inwardly-bent longitudinal bridge-piece bearing against the leg, and a hinged extension coupled to the convex member and secured to the clothing of the wearer, substantially as set forth.

10 4. A form for bow-legs comprising a longitudinal outwardly-convexed member having tapering ends and contacting with its edges along the leg, a longitudinally-disposed yielding bridge-piece carried on the inner face of  
15 the member, an intermediate cushion of cotton or equivalent material disposed on the outer face of the longitudinal member, an outer protecting layer for said cushioning layer, a padded extension hinged at the base of its

rear edge to the longitudinal member at a 20 point along the knee-joint to permit the free bending of the knee, and means for securing the extension to the clothing of the wearer, substantially as set forth.

5. A form for bow-legs comprising a longitudinal outwardly-convexed pliable member  
25 having tapering ends, and contacting with the leg only along the edges of the member whereby a layer of air is interposed between said member and leg, substantially as set  
30 forth.

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

GEORGE M. LUCE.

Witnesses:

EMIL STAREK,  
T. EVANS.