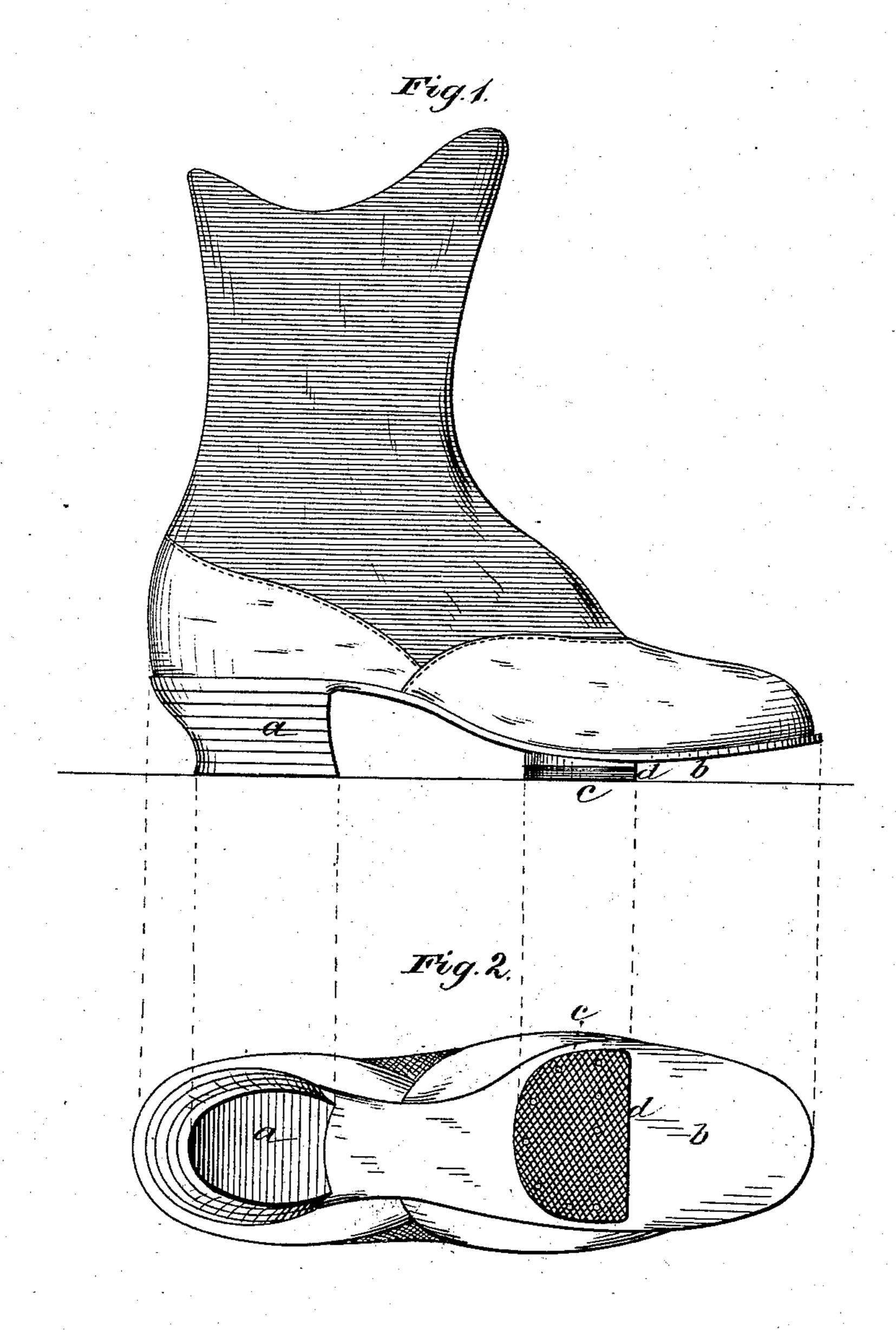
(No Model.)

G. W. DEAN.
Boot and Shoe.

No. 241,627

Patented May 17, 1881.



Witnesses. Jas E. Houtchinson. I S. Sangeton

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## United States Patent Office.

GEORGE W. DEAN, OF NEW YORK, N. Y.

## BOOT AND SHOE.

SPECIFICATION forming part of Letters Patent No. 241,627, dated May 17, 1881.

Application filed March 30, 1881. (No model.)

To all whom it may concern:

Be it known that I, George Washington Dean, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Boots and Shoes, of which the following is a specification

which the following is a specification. The boot or shoe is of the usual make; but I promote the comfort of the wearer by pro-10 viding the sole at the ball of the foot with a heel-shaped lift of india-rubber, of a width, or nearly so, of the sole, and of a height less than the heel proper, the said lift being fastened to the surface of the sole. Its use with 15 a thin sole is particularly advantageous for ladies' wear in keeping the feet dry and warm in wet weather, and therefore more healthy for the wearer. Shoes provided with such sole heel-shaped lifts support the feet in level po-20 sitions with the heels proper, and have all the advantages of thick soles in giving a firm tread both in walking and in standing. Shoes thus provided with sole heel-shaped lifts are rendered more durable and are lighter than thick-25 soled shoes. Shoes thus made relieve the toes of the foot from being cramped and pinched in walking from the pressure and weight of the body. In such a shoe there is less friction and binding of the foot than in a shoe in which 30 the foot is thrown forward by a high heel and a full surface tread of the sole. Such a shoe gives a freedom of step which a thick-soled shoe or boot cannot, and these advantages in a shoe made for constant wear are not possible 35 in a double-heeled wooden sandal, a non-walking foot-comforter with sole-lifts, forming a warming receptacle for both feet, and a sandal attachable to the shoe and provided with

heel of the shoe.

I have shown in the accompanying drawings a lady's gaiter, in which—

40 of a thick sole hooked to the toe and to the

Figure 1 is an elevation, and Fig. 2 a bot-

an elastic sub-sole countersunk in the surface

45 tom view, of my improvement.

The shoe is made with the usual heel, a, and a sole, b, and I provide the sole across the ball with a heel-shaped lift, c, of india-rubber, so

that it will yield slightly under pressure in walking. This sole heel-shaped lift is secured 50 to the leather sole in any suitable manner. Its front edge, d, must be straight, or nearly so, across the sole, and be equal in width thereto, or nearly so, to give the advantage of a full tread and support. It is of a less height than 55 the heel proper, and only high enough to give a natural and level position to the ball of the foot with the usual high heel. I prefer to have the surface of this ball heel-shaped lift of rubber, because it is noiseless and prevents slip- 60 ping; but leather may form the surface, and rubber be secured between it and the sole, the yielding capacity being the same in either case. The termination of the front edge of the ball heel-shaped lift straight across the sole is im- 65 portant in giving an easy bend to the shoe in walking. The yielding capacity of the ball heel-shaped lift renders the tread easy and causes it to bend more readily with the sole.

As the yielding capacity of the sole-lift need 70 only be very slight, the rubber lift may be comparatively thin, and secured to the leather sole by a leather lift to give the required height to such sole-lift

to such sole-lift.

I claim—

1. A boot or shoe having its sole provided at the ball with a heel-shaped lift of india-rubber, of a width, or nearly so, of the sole, and of a less height than the heel proper, the said lift being fastened to the surface of the sole 80 across the ball of the foot, substantially as described, for the purposes specified.

2. A boot or shoe having its sole provided at the ball with a heel-shaped lift, composed of layers of india-rubber and leather united to- 85 gether and fastened to the surface of the sole, and of a height less than the heel proper, sub-

stantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing wit- 90 nesses.

GEORGE W. DEAN.

Witnesses:
CHARLES HEATH,
W. P. BOLLES.