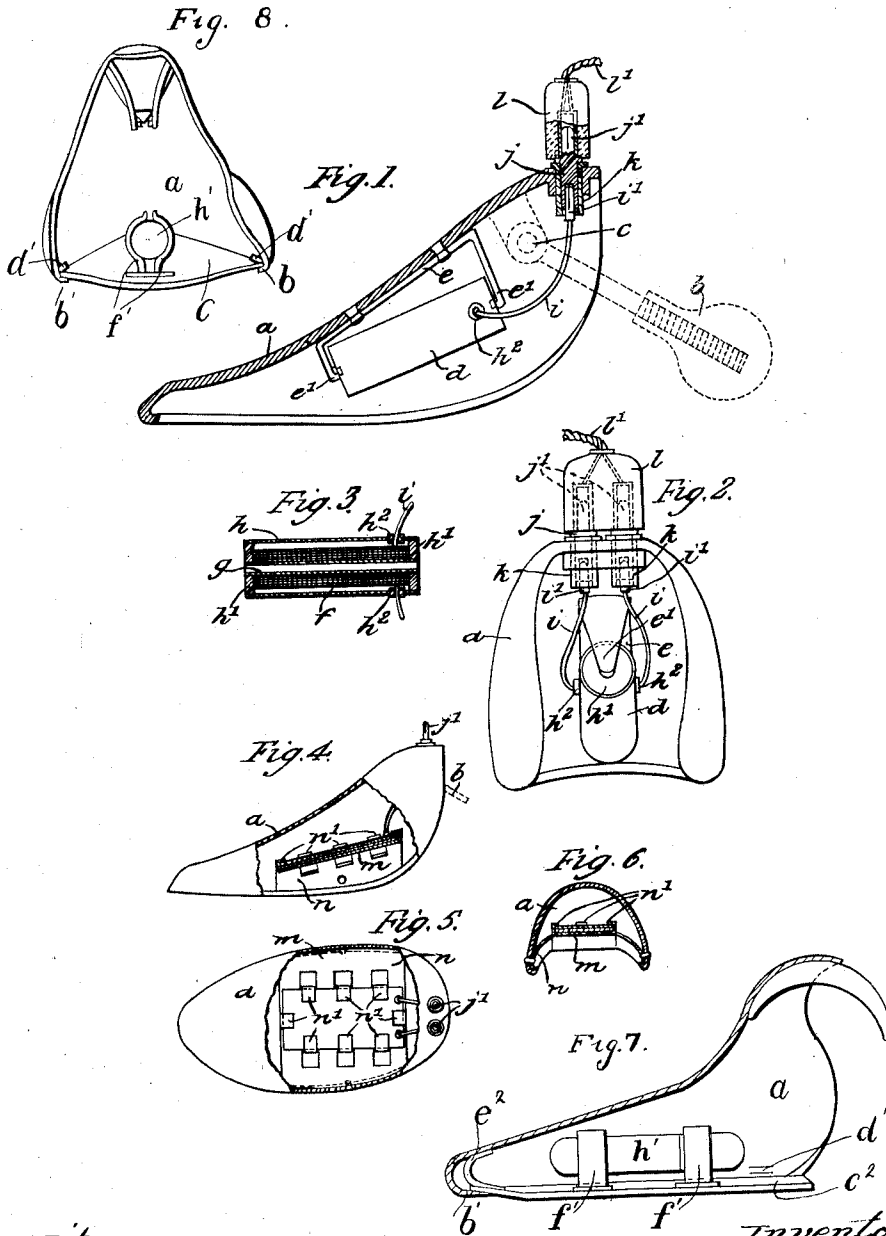


G. V. TWISS.
 FORM FOR BOOTS OR SHOES.
 APPLICATION FILED DEC. 7, 1909.

985,232.

Patented Feb. 28, 1911.



Witnesses
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UNITED STATES PATENT OFFICE.

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FORM FOR BOOTS OR SHOES.

985,232.

Specification of Letters Patent.

Patented Feb. 28, 1911.

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To all whom it may concern:

Be it known that I, GEORGE VICTOR TWISS, of 136 Melrose avenue, Wimbledon Park, Surrey, England, citizen of Great Britain, have invented certain new and useful Improvements in Forms for Boots or Shoes, of which the following is a specification.

The object of the present invention is a heatable form for footwear by means of which a boot or shoe can be heated or dried, as the case may be, in a stretched condition. In the hollow form an electric heating body is inserted which can be connected by means of plug contact with, for instance, the electric light installation of a room or other source of supply.

The invention includes further a particular construction of the form according to which the length of the latter can be regulated at will by means of a spring fork connecting the toe portion with the heel, the perforated prongs of the fork working in conjunction with lugs of the toe-portion. I also preferably attach the electric heater to a detachable piece which can be readily inserted or withdrawn from the form proper so that the form can be used either as a heating form or an ordinary form.

In the accompanying drawings, Figure 1 is a longitudinal section, Fig. 2 an end elevation, and Fig. 3 a section of one form of electric heating device, Figs. 4, 5 and 6 are views of a modified construction. Figs. 7 and 8 are views of still another modified construction.

With reference to Figs. 1 to 6 the form consists of a hollow body portion *a* usually of aluminium, paper or other suitable material and an adjustable expanding device *b* jointed thereto at *c*. The heating element *d* is carried preferably detachably by a frame *e* preferably of aluminium for lightness which is riveted or otherwise attached to the upper part of the form.

As shown in Fig. 3, the heating element may consist of a coil of wire *f* insulatingly wound around an aluminium tube *g* and inclosed within an aluminium or other cylinder *h* and having end plates *h'*. This heating cartridge *d* may be sprung into position on the carrier *e*, the depending arms *e'* of the carrier engaging in the ends of the tube *g*. The ends of the coil *f*, which may be of any suit-

able metal or alloy preferably of high resistivity, are suitably connected as by means of flexes *i* passing through insulating collets *h²* in the casing *h* and terminating in contact pins *i'* with terminals fixed on the form and readily accessible for connection with a source of electricity. As shown, the pins *i'* are inserted in the sockets of terminal plugs *j* which are tightly driven into or otherwise suitably secured in insulating bushes *k* in the top wall of the form. These plugs have projecting terminals such as the pins *j'* through which connection may be made with an electric circuit as by the terminal cap *l* and twin flex *l'*, which latter may have at the other end an adapter of the ordinary kind to enable the flex to be connected with a lamp socket or other source of supply.

In the modified constructions of Figs. 4, 5 and 6 the resistance is mounted or deposited on a flat base *m* usually of insulating material such as mica, which is carried by a bridge piece *n* preferably of aluminium secured within the form *a* and having clamps *n'* which may be conveniently formed by punching tongues out of the bridge piece and bending them over, and within which the resistance carrier is secured.

In Figs 7 and 8 *c²* is a detachable sole portion which is made to fit as a sliding bottom piece, indentations *d'* at each side of the forepart and the upper surface of the turned parts serving as the guides to said piece. At the toe end the sole portion may be made with a lug or the like *e²* to engage under the rim *b'* at that part of the forepart. The inner side of the sole portion may be provided with suitable means, for example spring clips *f'*, whereby a heating device such as an electric heater *h'* may be removably held.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:—

1. In a boot or shoe form, a hollow forepart, a heating device therefor, and spring means for detachably retaining said heating device within said hollow forepart.

2. In a boot or shoe form, a hollow forepart, an electric heating device therefor, spring means for detachably retaining said heating device within said hollow forepart,

and a plug contact whereby said heating device may be attached to the electric installation of a room.

3. In a boot or shoe form, a hollow forepart, a removable sole portion, and means
5 for removably holding a heater on said sole portion and within the hollow forepart.

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

GEORGE VICTOR TWISS.

Witnesses:

HERBERT D. JAMESON,
RIPLEY WILSON.