
L. T. KATCHEL

HEATED SHOE TREE FOR DRYING SHOES

Filed Aug. 25, 1947

2 Sheets-Sheet 1

Inventor

Lyle T. Katchel

By Randolph & Beavers

Attorneys
HEATED SHOE TREE FOR DRYING SHOES

Inventor:

Lyle T. Katchel

By Randolph & Beavers

Attorneys
This invention relates to a dryer for shoes and more particularly to a form that would be placed inside of shoes formed of leather, cloth and other material for slowly drying the foot wear after washing or dying and so that the material thereof will not be damaged by the heat employed in the drying operation.

More particularly, it is an object of the present invention to provide a form for a shoe or other footwear of extremely simple construction which is capable of being economically manufactured and sold and which is electrically energized for heating the form and so constructed that a minimum of electric current will be employed in the operation thereof and so that a slow drying of a shoe or other footwear will be accomplished thereby.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawings, illustrating a preferred embodiment thereof, and wherein:

Figure 1 is a side elevational view, partly in section, showing a preferred embodiment of the invention;

Figure 2 is a top plan view, partly in section thereof;

Figure 3 is a cross sectional view taken substantially along a plane as indicated by the line 3—3 of Figure 1, and

Figure 4 is a perspective view of the heating element support.

Referring more specifically to the drawings, the shoe dryer in its entirety is designated generally 5 and comprises a foot or shoe shaped form, designated generally 6 composed of an inner ply 7 of tissue paper or the like, an intermediate ply 8 of mesh wire fabric and an outer ply 9 of a quick drying plaster.

In constructing the shoe shaped form 6 the upper portion thereof, including the top 10, sides 11 and instep 12 are first constructed by shaping the mesh wire fabric 8 to form these parts and applying tissue paper 7 to the inner side thereof after which the quick drying plaster 9 is suitably applied to the external side of the mesh wire fabric and permitted to dry.

An opening 13 is formed in the top 10 in which is secured an electric plug 14 comprising a body 15 of electrical insulating material containing a cavity 16 in which are fastened corresponding ends of a pair of prongs 17 by fastening 18. The prongs 17 extend outwardly through the upper end of the plug body 15 and are adapted to be inserted in a female plug or outlet, not shown, connected to a source of electric current. The plug 14 also includes a pair of spring contact members 19 which are disposed in the cavity 16 and one of which is supported by each of the fastenings 18 and thereby mounted in electrical contact with the prongs 17, connected thereto. The bottom or inner end of the plug body 15 is provided with spaced openings 20 for receiving the prongs of a conventional electric plug 21 which extend removably therethrough into the cavity 16 and one of which, when thus disposed, is in bearing engagement with each of the spring conductor strips 19 for forming electrical connections between the prongs of the plug 21 and the prongs 17. The plug 21 is provided with electrical conductors 22 having corresponding ends connected to the prongs thereof and which project from said plug and are connected at their opposite ends to the two electrical contacts of a conventional socket 23 and which are disposed in a flexible tubing 24 between the plug 21 and socket 25.

A heating element support, designated generally 25 is mounted in the afore-mentioned upper portion of the form 6 and includes a frame having an arched shaped upper portion 26 which fits the inner side of said form and in bearing engagement with portion 22 which fits the inner side of said form and in bearing engagement with portions of the instep 12 and sides 11 thereof, as best seen in Figure 3 and the ends of which are connected by a substantially straight bottom portion 21, formed integral therewith. The side portions of the arch 26 each have a bracket 28 fastened to the inner side thereof and extending inwardly with respect to the frame of the holder 28. Each of the brackets 28 is formed of sections 27 the inner ends of which are flared outwardly and bowed to form the spring clamping jaws 29 adapted to detachably and resiliently engage an elongated heating element 30 which, in the embodiment of the invention as disclosed, is an elongated electric bulb having a threaded plug 31 at one end thereof which is adapted to extend toward the heel of the form 6 and to be screw threaded into the socket 23.

After the parts previously described have been assembled in the upper portion of the form 6, the sole or base portion of the form, which likewise comprises an inner ply 7 of tissue paper, an intermediate ply 8 of mesh wire fabric and an outer ply 9 of a quick drying plaster is applied to the open bottom of the upper portion of the form 6 for closing the bottom thereof and for retaining the parts previously described, therewithin. The
base or sole portion of the form 6 may be assem-
led in a suitable mold of the proper size and
shape and while the quick drying plaster thereof
is still in a pliable and soft condition, the open
bottom of the upper portion of the form is ap-
plied thereto and so that the plaster will form a
good bond between the upper and sole portion of
the form when it has become set.

The tissue paper 7 is disposed on the inner
sides of the mesh wire fabric 8 to prevent the
plaster 9 from seeping therethrough before it
has had an opportunity to dry and it is immate-
rial if the tissue paper is scorched or burned away
by the heating element 30 after the plaster has
dried.

From the foregoing it will be readily apparent
that the drying form 5 may be placed in a shoe or
other item of footwear of leather, cloth or other
material for drying the footwear after washing
or drying and which is accomplished by attach-
ing the prongs 17 to a conventional electric out-
let, not shown, such as a female plug of an elec-
tric cord extending from a source of electric
current. The heating element 30 is adapted to
be operated on conventional house current and
will use a very slight amount of electricity for
heating the form 5 only sufficiently to slowly dry
the shoe or footwear, not shown, in which the
form is disposed to prevent damage to the ma-
terial thereof in the drying operation.

Obviously other forms of heating elements
may be employed and various other modifica-
tions and changes are contemplated and may obvi-
ously be resorted to, without departing from the
spirit or scope of the invention as hereinafter
defined by the appended claims.

I claim as my invention:
1. A shoe dryer comprising a form adapted to
fit into a shoe or other item of footwear for sub-
stantially filling the same and having a hollow
interior, and an electric heating element con-
tained therein and adapted to be connected to a
source of electric current, said form comprising
an inner ply of tissue paper, an intermediate ply
of mesh wire fabric and an outer ply of plaster.
2. A shoe dryer comprising a form adapted to
fit into a shoe or other item of footwear for sub-
stantially filling the same and having a hollow
interior, and an electric heating element con-
tained therein and adapted to be connected to a
source of electric current, said form including a
reinforcing ply of a foraminous material and an
outer ply of a cement or plaster-like material
constituting a good conductor of heat.

LYLE T. KATCHEL.

REFERENCES CITED
The following references are of record in the
file of this patent:

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>385,232</td>
<td>Twiss</td>
<td>Feb. 28, 1911</td>
</tr>
<tr>
<td>1,054,950</td>
<td>Dutton</td>
<td>Feb. 25, 1913</td>
</tr>
<tr>
<td>2,063,370</td>
<td>Dutton</td>
<td>Dec. 8, 1936</td>
</tr>
</tbody>
</table>

FOREIGN PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Country</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>297,660</td>
<td>Great Britain</td>
<td>Mar. 29, 1928</td>
</tr>
</tbody>
</table>