

Hand-held electric steam brush

The invention relates to a hand-held electric steam brush having a support plate provided with steam discharge holes.

A hand-held electric steam brush of this
5 kind is known (German Patent 34 17 254). This
appliance comprises a support plate which is connected
to a steam producer. Water is conveyed from a
tank into the electrically heated steam producer
by means of a pump. The steam developed in the
10 steam producer comes out of the steam discharge
holes provided in the support plate. By controlled
directing of the steam, this appliance will remove
crumples and creases very effectively from clothing.
It is therefore ideal both for household use and
15 also for travelling. On the support plate there
are holders for removable brushes by means of which
the range of application of the appliance can advantageously be extended. In spite of its many possible
uses, the known hand-held steam brush cannot be
20 used for pressing trouser creases, or for ironing
pleats in skirts, blouses, shirts or the like.
The users of the known hand-held steam brush are
therefore obliged to take other appliances with
them when they travel to enable them to look after
25 their wardrobe properly, or else to make use of
local services.

Viewed from one aspect the invention provides
a hand-held electric steam brush comprising a support
plate provided with steam discharge holes, a pressure
30 plate releasably secured to the support plate and
being provided with steam openings which register
with the steam holes of the support plate, and
means for mounting a brush on the pressure plate.

Viewed from another aspect the invention provides a hand-held device for pressing materials such as fabrics, garments and the like, comprising a support plate provided with holes for discharging
5 steam, and a pressure plate provided with openings arranged to register with the steam holes of the support plate, the pressure plate being secured to the support plate in such a way as to enable said materials to be pressed between the plates.

10 The pressure plate thus enables materials such as fabrics, garments and the like to be pressed, so that it is possible to put fresh creases in trousers, pleats in blouses, shirts and skirts or the like. However, it is also possible to refresh
15 and renew the creases already in the materials. The range of application of a hand-held steam brush can thus be substantially expanded.

The pressure plate may be fixedly connected to the support plate by means of a pressure plate
20 locking device, and the pressure plate then forms a unit with the support plate. With the pressure plate locked in this way, steam generated in the appliance flows in controlled manner onto the material being treated, just as if the appliance had only
25 a support plate since the steam holes of the support plate are arranged so as to register with the steam openings of the pressure plate. Thus in spite of the presence of the pressure plate the hand-held steam brush may be used like the known hand-
30 held steam brushes for refreshing and brushing garments. The brush mounting means provided on the pressure plate can be used to secure a brush attachment to the outside of the pressure plate if the appliance is to be used as a brush. In order to press trouser
35 creases, the pressure plate locking device is released. The pressure plate may be lifted away from the support plate by the force of a compression spring.

Preferably the support and pressure plates are hinged to each other by means of at least two spacers each pivotable about a pair of articulation points respectively provided on the support plate and on the pressure plate whereby the plates are movable towards and away from each other. Preferably a holder is connectible to the support plate, the articulation points for the spacers being provided by said holder. Thus the spacers, which are hinged to the support plate via the holder and directly to the pressure plate, cause a generally translatory movement of the plates. At the same time, between the support plate and the pressure plate, a gap defined by the two plates is formed having substantially parallel boundary surfaces. The material or garment, e.g. trouser leg, which is to be pressed is placed in this gap. Then the two plates are pulled together, preferably by using a handle provided for the pressure plate, and a jet of steam is released. In the area covered by the two plates, the material inserted is pressed smooth and the new crease is put in or the old crease is renewed, as desired. It is possible for hand-held steam brushes of the type already known to be adapted in accordance with the invention by securing to the normal support plate a suitable pressure plate.

A preferred embodiment of the invention will now be described by way of example and with reference to the drawings in which:-

Figure 1 shows a hand-held steam brush having a pressure plate according to the invention; and

Figure 2 shows the hand-held steam brush according to Figure 1 with the pressure plate raised.

The hand-held steam brush shown consists of a support plate 1 with steam holes 2 and a covering hood 3 releasably secured to the support plate 1. A pressure plate 4 is releasably secured to

the support plate 1. The pressure plate 4 is connected to the support plate 1 by a holder 5 which is releasably secured to the support plate 1 by means of a push-in connection 16. However, it is also possible
5 to attach a frame-like holder to the support plate by screwing or by a force fit. The holder 5 and the pressure plate 4 are effectively connected via the spacers 6 secured in the articulation points 17, 17', 18, 18'. A pressure plate locking device
10 7 is arranged on the support plate 1. As shown in Figure 1, the pressure plate 4 can be fixedly connected to the support plate 1 by means of the pressure plate locking device 7. The pressure plate 4 has steam openings 8 which, in this position,
15 register with the steam holes 3 in the support plate 1. The locking device is releasable by means of the operating knob 9, and as a result the pressure plate 4 is lifted away from the support plate 1 by the spring 10 and the spacers 6 hinged thereto,
20 thereby performing a translatory movement, as shown in Figure 2.

In this position, a gap 13 with substantially parallel boundary surfaces is formed by the support plate 1 and pressure plate 4. For ironing, the garment
25 which is to be pressed is inserted in this gap 13. Then the pressure plate 4 is pressed against the support plate 1 by means of a handle 11 provided on the pressure plate 4 and a controlled jet of steam is released by means of the button 14. As
30 a result, the garment inserted is ironed in the region of the plates 1 and 4. Brush holders 12 are provided on the outside 15 of the pressure plate 4 for securing brush attachments.

Claims

1. A hand-held electric steam brush comprising a support plate provided with steam discharge holes, a pressure plate releasably secured to the support plate and being provided with steam openings which
5 register with the steam holes of the support plate, and means for mounting a brush on the pressure plate.
2. A hand-held steam brush as claimed in claim
10 1, wherein the support and pressure plates are hinged to each other by means of at least two spacers each pivotable about a pair of articulation points respectively provided on the support plate and on the pressure plate whereby the plates are movable
15 towards and away from each other.
3. A hand-held steam brush as claimed in claim
2, further comprising a holder connectible to the support plate, the articulation points for the
20 spacers being provided by said holder.
4. A hand-held steam brush as claimed in claim
2 or 3, wherein the pressure plate is movable towards the support plate by means of a handle and counter
25 to the force of a spring.
5. A hand-held steam brush as claimed in any
preceding claim, wherein a pressure plate locking
device is provided on the support plate.
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6. A hand-held steam brush as claimed in any
preceding claim, wherein the support plate forms an outer wall of the hand-held steam brush.



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7. A hand-held device for pressing materials such as fabrics, garments and the like, comprising a support plate provided with holes for discharging steam, and a pressure plate provided with openings
- 5 arranged to register with the steam holes of the support plate, the pressure plate being secured to the support plate in such a way as to enable said materials to be pressed between the plates.
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