

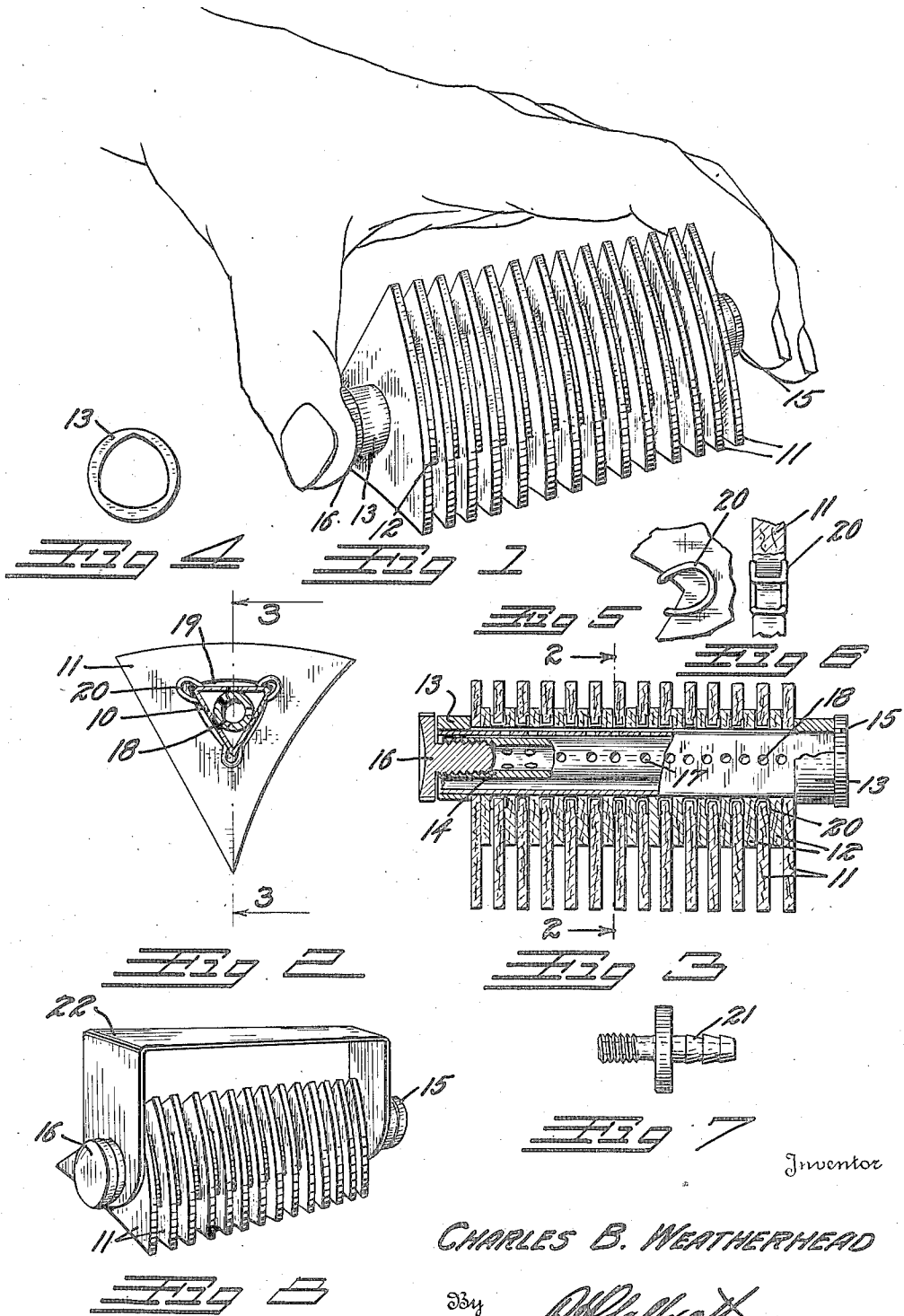
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C. B. WEATHERHEAD

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BRUSH

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Inventor

CHARLES B. WEATHERHEAD

By

R. H. P. [Signature]

Attorney

UNITED STATES PATENT OFFICE

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BRUSH

Charles B. Weatherhead, Denver, Colo.

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7 Claims. (Cl. 15—124)

This invention relates to a brush, and while more particularly designed as a hat finisher's brush, it is not, of course, limited to this particular use, but will find many uses in many different lines.

The principal object of the invention is to provide a brush which will efficiently contact with and rub the surface being treated; which will be adaptable for use upon surfaces of various contours; in which the rubbing portions may be renewed or replaced with various materials to accommodate various types of surfaces; and which will be neat, compact, and easy to use.

Another object of the invention is to so construct the brush that treating fluids or powders may be automatically applied to the surfaces being treated during the brushing operation.

A further object is to so construct the brush that it can be connected with a source of air pressure or a vacuum for removing foreign material from the surfaces.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention reference is had to the accompanying drawing which forms a part thereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:—

Fig. 1 is a perspective view illustrating the appearance of the preferred form of the approved brush as it appears when in use.

Fig. 2 is a cross-section therethrough, taken on the line 2—2, Fig. 3.

Fig. 3 is a longitudinal section taken on the line 3—3, Fig. 2.

Fig. 4 is a detail face view of the end washer employed in the brush.

Figs. 5 and 6 are detail views of the reinforcing, spacing clips.

Fig. 7 illustrates a nipple which may be applied to the brush to adapt it to compressed air or vacuum cleaning.

Fig. 8 illustrates how the brush may be provided with a handle.

The invention comprises a triangular tube or core 10, along which, a series of triangular brush members 11 are spaced, alternating with suitable spacers 12. The brush members 11 may be stamped or cut from any sheet material suitable for the particular work to be done with the brush. For hat finishing brushes, it has been

found that laminated sheets of rubber impregnated fabric are most satisfactory. The brush members are cut so that they present a convex edge at one face of the brush; a concave edge at another; and a straight edge at another. The brush members and their spacers are clamped together throughout the length of the triangular tube 10 between clamping washers 13 positioned at the tube extremities.

A cylindrical inner tube 14 passes entirely through the triangular tube or core 10. One extremity of the inner tube 14 carries a head 15 and a threaded cap 16 is threaded into the other extremity of the tube. When the cap 16 is screwed tightly into place it clamps the washers 13 and brush members 11 tightly in place against the head 15. It is preferred to perforate the inner tube 14, as shown at 17, and to provide similar perforations 18 in the flat faces of the triangular tube 10.

By rotating the head 15, the perforations of the inner tube may be aligned with the perforations of the triangular tube when desired. When misaligned, the walls of the triangular core close the perforations in the inner tube 14. Thus, the inner tube acts as a valve controlled by the head 15 so that material in the inner tube may be allowed to flow through the core perforations only when desired.

It is desired to call particular attention to the construction of the brush members 11. These members are formed with triangular openings for receiving the core and for preventing rotation of the brush members on the core. These triangular openings are formed with outwardly curved sides so that a space 19 will be left entirely along each of the walls of the triangular tube. The corners of the triangular openings in the brush members are reinforced by reinforcing clips 20 which also act as spacing members to space each brush members from its adjacent spacers 12 so as to allow free passage between the members and the spacer for the material flowing from the inner tube 14.

A hose nozzle 21 may be furnished with the brush which can be threaded into the place of the cap 16 so that the brush can be connected to the extremity of a flexible hose which in turn may be connected to a vacuum or air pressure source.

The brush may be held between the thumb and fingers as shown in Fig. 1 or may be provided with any suitable handle 22, as shown in Fig. 8, which fits over the spacing washers 13. In use, the operator turns the desired contour of

surface downwardly and rubs the brush over the article to be cleaned or otherwise treated with the brush members extending laterally of the direction of movement. A powdered or a liquid substance may be placed in the inner tube 14 and allowed to exude through the perforations and between the brush members to assist in the cleaning or treating operation, or the nipple 21 may be employed for air cleaning purposes. The flow of the cleaning or treating substances may be easily adjusted by turning the head 15. The convex, concave and flat contours of the brush make it particularly effective on surfaces of various configurations such as encountered in the cleaning and blocking of hats.

For unusually heavy work, metal plates can be used for the brush members. The relatively sharp edges of the plates form an ideal medium for scraping, removing varnish, etc. The metal plates could be separated by the same flexible spacers 12 to provide flexibility.

While a specific form of the improvement has been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:—

1. A brush comprising: a triangular core; a series of flat brush members, said brush members having a triangular opening for receiving said core; means for spacing said brush members along said core; a clamping member passing through said core; a head on one extremity of said clamping member for holding said brush members in place; and a threaded cap on the other extremity of said clamping member for clamping said members in place.

2. A brush comprising: a triangular core; a series of flat brush members, said brush members having a triangular opening for receiving said core; means for spacing said brush members along said core; a cylindrical tube passing through said core and contacting the walls thereof, said tube being perforated, there being registering perforations in said walls so that said tube may be rotated to align its perforations with the wall perforations.

3. A brush comprising: a triangular core; a series of flat brush members, said brush members having a triangular opening for receiving said core; means for spacing said brush members along said core; a cylindrical tube passing through said core and contacting the walls there-

of, said tube being perforated, there being registering perforations in said walls so that said tube may be rotated to align its perforations with the wall perforations; and a cap for closing said tube and clamping said brush members in place.

4. A brush comprising: a triangular core; a series of flat brush members, said brush members having a triangular opening for receiving said core; means for spacing said brush members along said core; a cylindrical tube passing through said core and contacting the walls thereof, said tube being perforated, there being registering perforations in said walls so that said tube may be rotated to align its perforations with the wall perforations; and means for attaching a flexible hose to said tube.

5. A brush structure comprising: a core having flat longitudinal surfaces; a series of flat brush members spaced along said core, each of said members being provided with an opening for receiving said core, said opening conforming to the shape of said core so as to prevent said brush members from rotating thereon; a series of spacing members surrounding said core between said brush members; and clips carried by said brush members so as to space them from adjacent spacing members.

6. A brush structure comprising: a core having flat longitudinal surfaces; a series of flat brush members spaced along said core, each of said members being provided with an opening for receiving said core, said opening conforming to the shape of said core so as to prevent said brush members from rotating thereon; and a U-shaped handle member extending from end to end of said core and rotatably supporting the same at its extremities.

7. A brush comprising: a hollow core having flat longitudinal surfaces; a series of relatively soft, flat brush members of similar contour spaced along said core in alignment with each other, each of said members being provided with an opening for receiving and engaging the corner edges of said core so as to prevent rotation thereon, and being spaced from said core intermediate said corner edges to allow material to pass between said core and said brush members; a series of spacing members spacing said brush members and said spacing members together along said core, the sides of said core being perforated to allow material to escape from its hollow interior to said brush members.

CHARLES B. WEATHERHEAD.