

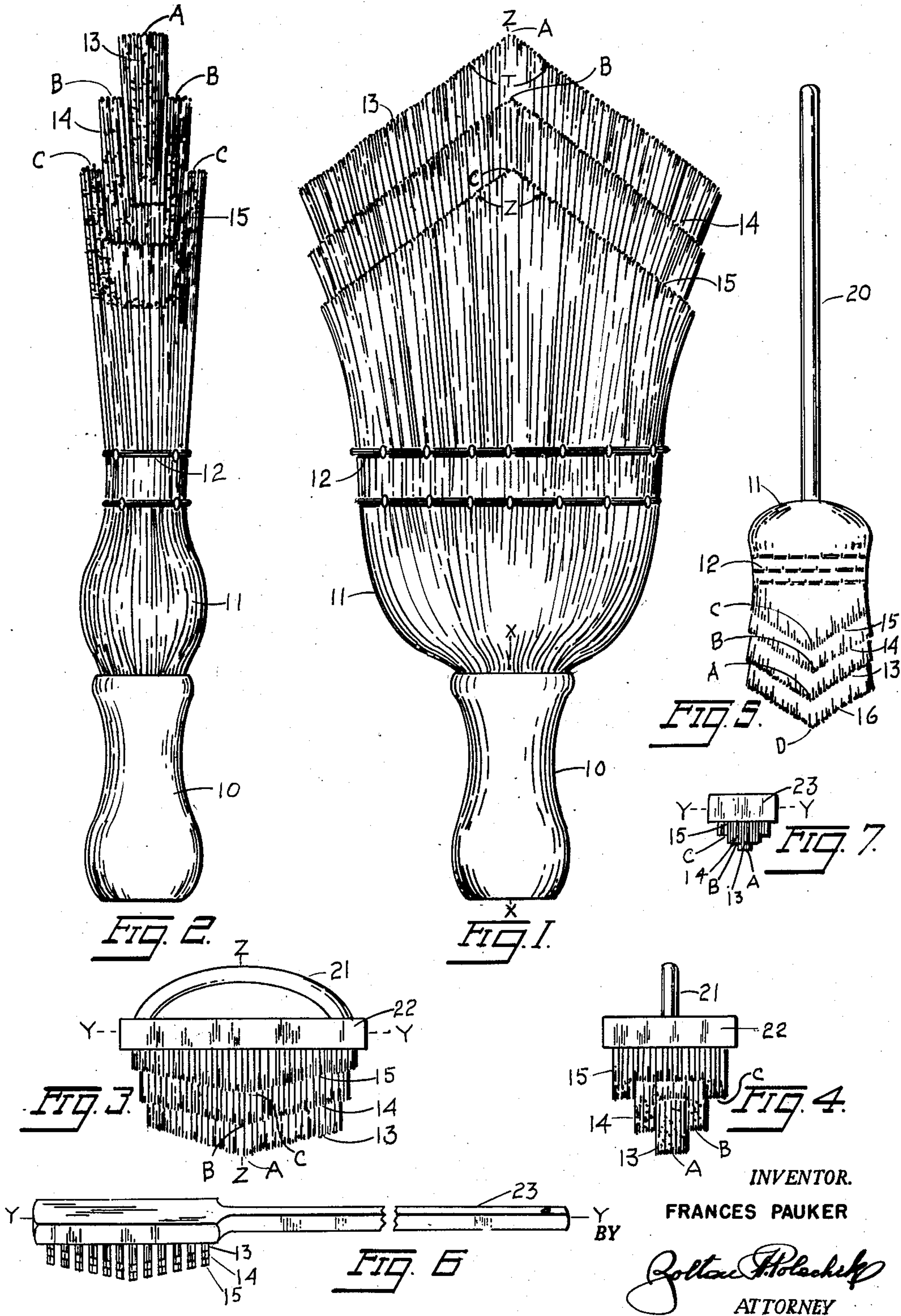
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TAPERED BROOM

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## TAPERED BROOM

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1 Claim. (Cl. 15—160)

This invention relates to a novel brush or broom useful for cleaning clothes and furniture, and other related purposes.

It is a principal object of the invention to provide a brush or broom having a tapered contour adapted to enter narrow crevices and interstices.

It is a further object to provide a brush or broom having a substantially flat body and tiers of bristles arranged in a tapered configuration.

It is a further object to provide a brush or broom having a tiered array of bristles for more effective cleaning and to minimize wear.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is an elevational view of a whisk broom embodying the invention.

Fig. 2 is an end view of the brush of Fig. 1.

Figs. 3 and 4 are elevational and end views respectively, of a brush.

Fig. 5 is an elevational view of a broom.

Figs. 6 and 7 are side and end views, respectively, of a toothbrush.

In Figs. 1 and 2 is shown a substantially flat whisk broom having a socketed handle 10 in which terminate the aligned and juxtaposed bristles 11. Cords or wires 12 bind the bristles intermediate of their ends. At their free ends the bristles are arranged in a plurality of tiers 13, 14, 15. The several tiers each terminate at the center in a point as at A, B, C, respectively. Each tier is substantially wedge-shaped and the entire array as viewed endwise in Fig. 2 has a plurality of steps. This configuration of the brush adapts it to enter narrow interstices in cleaning clothing, painting, and similar uses. Brushes heretofore known, such as whisk brooms, have conventionally been made with flat ends which do not enter narrow crevices without distorting the shape of the body of the brush or broom. The bristles of the broom or the brush may be made of straw, synthetic fibers, hemp, jute and other suitable filamentary materials.

The brush shown in Figs. 3 and 4 has a flat base plate 22 to which is attached the generally inverted U-shaped handle 21. Secured to the base plate 22 are the wedge-shaped tiers 13, 14, 15 of bristles. The bristles may be fairly stiff and the brush in this form may be used as a

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scrub brush as well as a brush for personal hygiene use, e. g. as a fingernail brush.

In Fig. 5 is shown a broom usable for sweeping. The wedge-shaped tiers 13, 14, 15, 16 permit sweeping in narrow spaces where the usual flat-end broom cannot reach. The blade-like wedge-shaped tiers prevent uneven wear and warping of the straw fibers commonly experienced with conventional brooms. A long handle 20 is provided for working with the broom. The reference symbols in Fig. 5 are numbered to correspond with those of like parts in Figs. 1 and 2. The broom has an additional wedge-shaped tier 16 with an apex D at the end of the broom.

In Figs. 6 and 7 is shown a toothbrush. The bristles are attached to the handle 23 in tiers 13, 14, 15, each being wedge-shaped and having apices A, B and C, respectively. This structure is well adapted to clean teeth efficiently since the longer bristles in tier 13 readily enter crevices between the teeth, while the shorter and stiffer bristles in tiers 14 and 15 effectively clean exposed surfaces.

The apices A, B and C of the juxtaposed tiers in all embodiments of the invention are aligned with each other and point in a direction away from the handle of the brush or broom. In the brushes or brooms of Figs. 1 and 5 the line of alignment Z—Z of the apices is parallel to the longitudinal axis X—X of the handle of the brush or broom. In the brushes of Figs. 3 and 6 the line of alignment Z—Z of the apices A, B, C is perpendicular to the longitudinal axis Y—Y of the plate 22 and of the handle 23, respectively.

The apex angle T of the several tiers in each of the disclosed embodiments of the invention will be such as to accomplish the intended purpose of the brush or broom most effectively. This angle may vary from fifteen degrees to one hundred and sixty-five degrees depending on the functions to be performed by the brush or broom. For certain brushes and brooms the apex angle of each tier may be different.

While I have illustrated and described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

A whisk broom comprising a wide bristle body with the bristles gathered at the transverse center of the body at one end thereof and flaring laterally at the other end thereof, an elongated handle secured at one end to the gathered bristles, the flaring end of the bristles having stepped wedge-shaped tiers, the tiers being in parallelism with each other, with the apices thereof being disposed along the axis of the handle, the surfaces of said tiers being flat.

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