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B. D. GOLDBERG

1,748,950

CARDING BRUSH

Filed Nov. 11, 1927

Fig. 1,

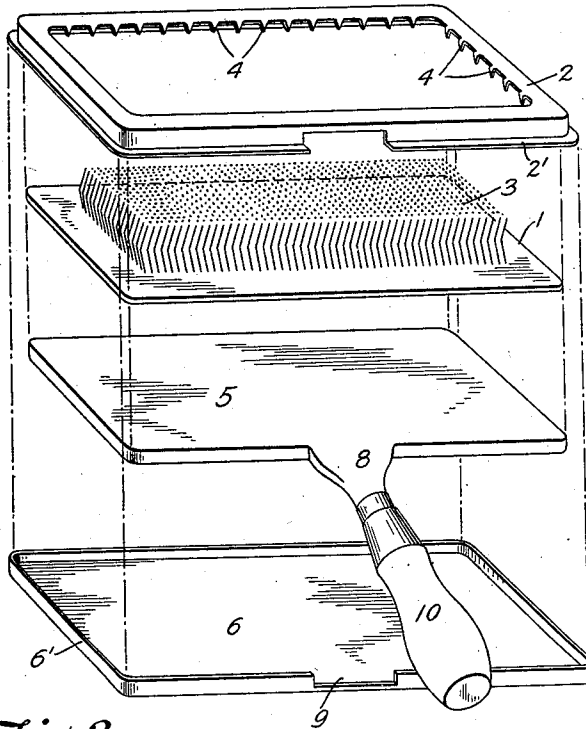


Fig. 5,

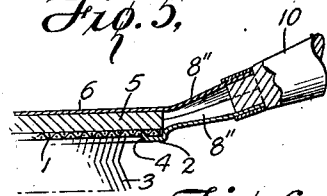


Fig. 6,

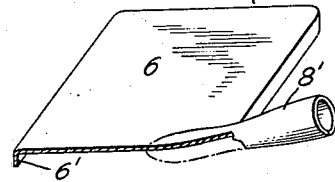


Fig. 7,

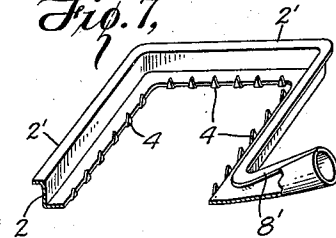


Fig. 9,



Fig. 2,

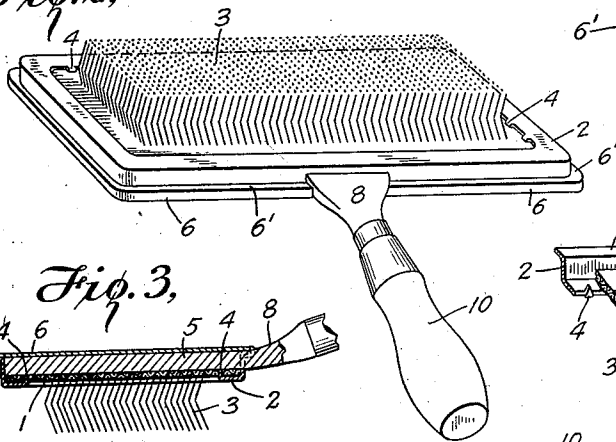


Fig. 3,

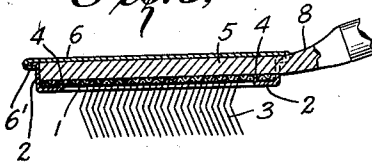


Fig. 8,

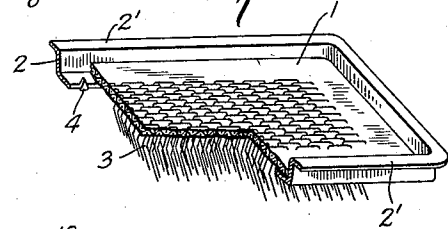
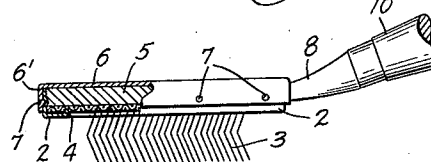


Fig. 4,



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CARDING BRUSH

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My invention relates to a hand carding device for brushing or stripping wool, cloth, furs, hair, or other fibrous materials by means of closely assembled teeth or points of wire or other material set in a suitable support.

The invention relates more particularly to a device wherein the assembled teeth or points comprising U-shaped wires are inserted or set in a foundation sheet of rubber, leather or other pliable or flexible material.

One of the objects of my invention is to provide a device of the general character referred to which shall be simple, durable and which may be cheaply constructed and in such manner that parts shall all be secured together firmly so that they will not become loosened during use.

A further object is to produce a device of the character referred to which shall present at its base or rear side opposite the brushes and at all its edges a smooth finished appearance free from rough or salient projections or edges and particularly as to the back shall present if desired a smooth continued surface. To these ends the invention consists in the combination of parts and the elements or details of construction hereinafter more particularly described and then specified in the claims.

In the accompanying drawings:

Fig. 1 is a general perspective view of the elements of the device arranged in their relative position but in disassembled relation.

Fig. 2 is a perspective view of the device completed and seen on the brush or points side.

Fig. 3 is a vertical cross-section of the device, Fig. 2, in the line of the handle portion thereof.

Fig. 4 is a partial section showing a modification.

Figs. 5 and 6 show modifications in the handle shank portion of the device.

Fig. 7 is a perspective view of a portion of the frame in which the foundation is set.

Fig. 8 is a perspective view of said frame showing the foundation set in place therein.

Fig. 9 shows a modification wherein the foundation lies against the cover plate acting as a backing for the foundation.

1 indicates the leather, rubber or other foundation usually of flexible or pliable character in which the teeth or points of the card are set. Said teeth or points preferably consist, as indicated, of U-shaped pieces of wire inserted through the foundation and prevented from pulling out by the cross member of the U which lies upon the back of the foundation. 2 indicates a rigid integral frame preferably of metal adapted to form a rigid or solid continuous supporting frame for the foundation supported therein upon the ledge or flange extending inwardly from the vertical member of said frame as shown in Figs. 3, 4 and 8. In order to hold the foundation firmly in its place and stretch it on said frame the said ledge of the frame may be provided with the metal ears or points 4 which are preferably integral with the frame and engage the edge of the foundation from the bottom side and securely hold said foundation stretched in place. Said projections, teeth or points 4 may be formed in any part of the ledge or supporting portion of the frame as will be obvious to those skilled in the art. Said frame may also be formed with the overhang or ledge 2' at its upper side as clearly shown in Fig. 7 for a purpose to be presently described. At 5 is indicated a backing for the foundation, said backing comprising a plate of suitable material, preferably metal, which lies upon the back of the foundation and against the base of the U-shaped wires and is secured in position thereon by any suitable means, as for instance by the plate or member forming the cover or back plate and to which the frame 2 is secured. Said back plate or cover is indicated at 6 and for the purpose of fastening the frame and back plate together the edge of the back plate may be turned over the flange 2' of the frame as indicated at 6', Fig. 3 and other figures, after the foundation has been secured in place in the frame and the backing laid thereon. The fastening of the cover plate 6 in position over the backing as described completes the structure. The foundation having been attached by its edges to the frame 2 by means of the points 4, the effect of forcibly turning down the edge of

the backing plate over the flange 2' to lock the parts together will be to cause the upper portion of the frame 2 carrying the teeth 4 to expand or rock outwardly lightly thereby exerting a slight pull upon the foundation and stretching or putting tension on the same and thereby helping to make it comparatively rigid. The manner of incorporating the handle device in the structure will now be described.

As shown in Figs. 1, 2 and 3, the back plate 6 is provided as indicated at 9 with an opening in its flange or downwardly extending edge through which projects the handle shank 8. Said handle shank is of metal and is integral with the backing 5. The handle proper indicated at 10 may be made of wood or other material and is secured to or forms an extension of the shank 8 in any usual or desired manner. Said handle shank or handle might be made integral with the top or cover plate 6 as indicated at 8', Fig. 6, or might be made integral with the metal frame 2 as indicated in Fig. 7 at 8'. If desired said shank may be made in part of a projection 8'' integral with and projecting from the cover 6 and a similar co-operating part projecting from and integral with the lower edge or portion of the frame as shown in Fig. 5. The two co-operating shank members 8'' together form in this instance a shank for reception of the end of the handle. It will be obvious that in each of the cases just described the handle shank might be extended with the handle proper so that the handle, its shank and the element of the device from which the shank projects would be a single or integral piece.

As shown in Fig. 4 the frame and the back or cover 6 may be fastened together by indenting the downwardly projecting flange 6' of the cover to engage it with the upwardly projecting member of the frame 2 as indicated at 7. As will be obvious, in this instance the overhang 2' would be dispensed with; also the inturning of the downwardly projecting edge or flange of the cover plate would not in this instance be necessary. As indicated in Fig. 9, the use of a separate backing plate 5 might be dispensed with and the inside of the cover plate form the backing for the foundation which in this instance would lie directly in contact therewith. Also the downwardly and inwardly turned edge of the cover plate would be the continuous rigid supporting frame for the foundation as already described, in which case the use of the separate frame 2 would be unnecessary. In this instance and as shown the inwardly turned flange of the frame would as before be provided with the means for fastening the foundation in stretched or extended position, said edge being provided with the ears, teeth or points struck up therefrom and passing through the foundation and locked by overturning them on the inside thereof. The

handle, backing and frame are here shown integral.

What I claim as my invention is:

1. In a device of the character described, the combination of a wire carrying foundation, an integral rigid frame forming a rigid border enclosing the edge of the wire-carrying foundation, a backing cover plate and means integral with the cover plate and frame interlocking them with one another to hold the parts together.

2. In a device of the character described, the combination of a foundation carrying wire points, a rigid frame forming a continuously rigid integral border around the edge of the foundation and within which said foundation is supported, a top plate and means integral with said frame interlocking with an integral portion of the top plate for securing the parts together.

3. In a device of the character described, the combination of a foundation carrying wire points, a rigid frame forming a continuous integral rigid border around the edge of said foundation and within which the same is supported, a plate lying upon the back of the foundation, and a cover plate interlocking with the frame and holding the foundation and plate together in position within said frame.

4. In a device of the character described, the combination of a wire-carrying foundation, a frame forming a rigid integral border around the edges of the foundation and within which said foundation is supported, a cover plate, a backing plate interposed between the back of the foundation and said cover plate, means for securing the frame to the cover plate comprising interlocked integral edges of said members and a handle shank integral with an element of the device.

5. In a device of the character described, the combination of a wire-carrying foundation, a frame, means for attaching the foundation by its edges to said frame, a backing, a cover plate, and means for securing the edges of the frame to the cover plate to cause the foundation to be stretched.

6. In a device of the character described, the combination with a foundation having U-shaped wires set in it, a rigid supporting frame consisting of an integral continuous border enclosing the edge of the foundation and to which said foundation is secured, a backing plate, a cover plate, means for securing said parts together by interlocked edges of the frame and cover plate, and a handle shank projecting from an element of the device and integral therewith.

Signed at New York in the county of New York and State of New York this 10th day of November A. D. 1927.

BENJAMIN D. GOLDBERG.