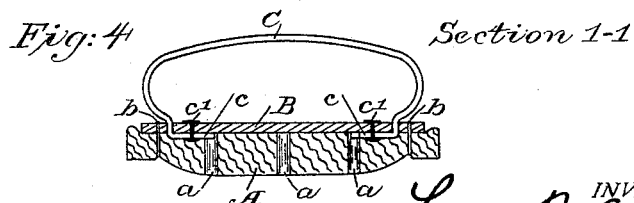
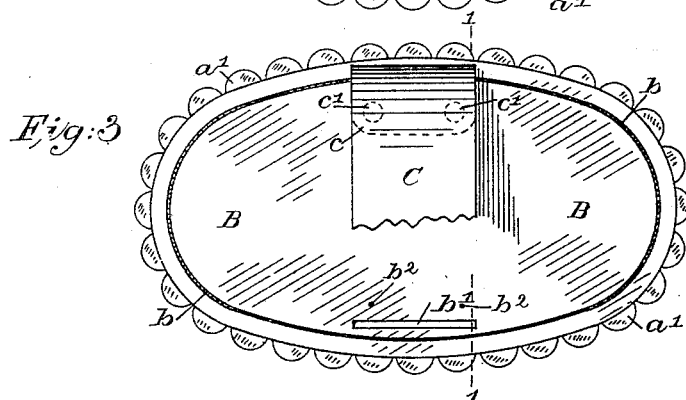
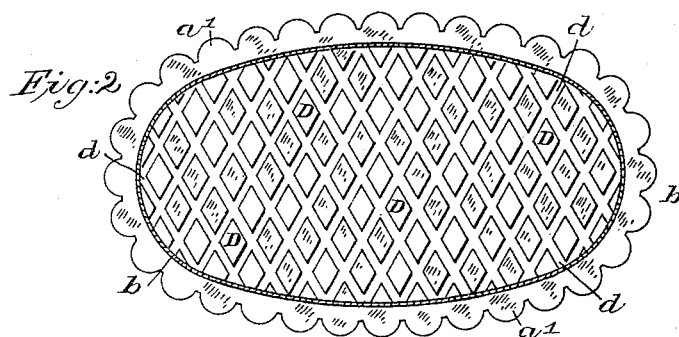
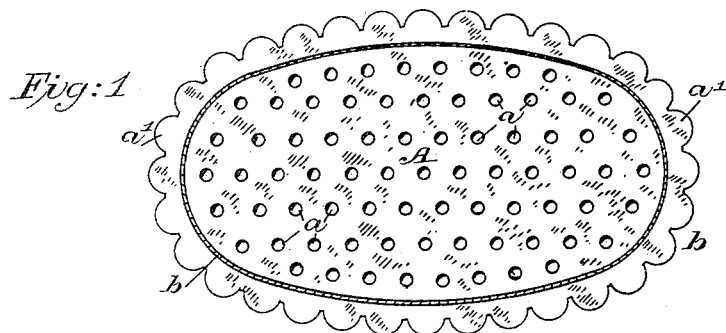


(No Model.)

L. R. GUFFIN & J. A. PETRIE.
BRUSH.

No. 454,521.

Patented June 23, 1891.



WITNESSES:

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LEWIS R. GUFFIN AND JAMES A. PETRIE, OF GLOVERSVILLE, NEW YORK.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 454,521, dated June 23, 1891.

Application filed June 25, 1890. Serial No. 356,747. (No model.)

To all whom it may concern:

Be it known that we, LEWIS R. GUFFIN and JAMES A. PETRIE, citizens of the United States, residing at Gloversville, in the county of Fulton and State of New York, have invented certain new and useful Improvements in Brushes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in brushes adapted to be used for cleaning horses, and has for its objects to remove dust, dirt, and loose hair from the animal and to leave the coat smooth and glossy, and also to provide suitable means for securely fastening a handle to the back of a brush, and to adapt said handle to conform to the hand of the user. These objects we accomplish by the means illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the under side of a brush embodying our invention. Fig. 2 is a plan view of a modification of our invention. Fig. 3 is a sectional plan view of the back of brush. Fig. 4 is a vertical cross-section taken on line 1 1 of Fig. 3.

As represented in the drawings, A represents a facing of felt secured to a leather back B, which is provided with a band C, extending transversely of the back and secured thereto at its ends to form the ordinary holder for the hand. The facing is made of felting having a rough surface adapted to gather up the dirt and loose hair from the animal. The surface of this facing is made substantially level, in order that there may be no uneven sharp ridges to chafe the hide of the horse and cause irritation and soreness. Indentations are formed on the level surface of the facing in any suitable manner, such as the round perforations *a*, (shown in Fig. 1,) or the transverse diagonal grooves *d*. (Shown in Fig. 2.) These indentations serve a double purpose. They form scraping-edges, which gather up the dust and dirt, and also form receptacles to hold the same when gathered. After the dirt has been removed from the horse the brush may be readily cleaned by tapping it against any hard substance.

The back is made flexible, so as to readily conform to the irregularities in the shape of the different portions of the horse, and the felt is secured to the leather back by means of a row of stitching *b*.

The leather back B is provided with longitudinal slots *b'*, through which the ends *c* of the handle *Care* passed. They are then curved inwardly toward each other, so that the hand may rest on the curved inner sides of the handle. The handle being flexible will then conform itself to the shape of the hand of the user. By means of this construction, moreover, the stitching which secures the back to the facing is relieved of the additional and uneven strain commonly caused by securing the handle to the back by the same stitching which secures the back to the facing. This construction may be used to secure the handle to the back of brushes having a brushing-face differing materially from that shown herein.

When constructed as shown in Fig. 2, the diagonal grooves *d* enable the back and facing to be readily bent to conform to the curves of the body of the horse.

With our device we accomplish in one operation what formerly required two—first, a brushing with a hair-brush, and then a rubbing down with a woolen cloth or flannel. The animal can be more quickly and thoroughly cleaned, because he does not become restless and uneasy as when irritated by the ordinary bristle brush, and the hair is left in a much smoother and more glossy condition. By our device, moreover, the horse may be cleaned when wet with perspiration and the hair left to dry smooth and even, whereas a horse's skin is too sensitive when in such condition to be cleaned with a bristle brush, and the hair must be left to dry before cleaning, and it then becomes rough and uneven when dry.

What we claim is—

1. A brush having a brushing-face secured to a back by means of a row of stitching extending around the edge of the face and back, and a handle having its ends inserted through longitudinal slots formed in the back of the brush within the row of stitching and secured to the under side of said back, whereby the handle is secured to the back independently

of said row of stitching, substantially as shown and described.

2. A brush having a flexible leather back, a handle, and a felt facing secured to said back
5 and provided with transverse grooves cut in said face, whereby the flexibility of the face is increased, substantially as described, for the purpose specified.

In testimony whereof we affix our signatures in presence of two witnesses.

LEWIS R. GUFFIN.
JAMES A. PETRIE.

Witnesses:

D. W. ANIBAL,
J. S. HAMILTON.