L. O. EKREM.

BRUSH.

APPLICATION FILED JULY 9, 1907.

908,652.

Patented Jan. 5, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

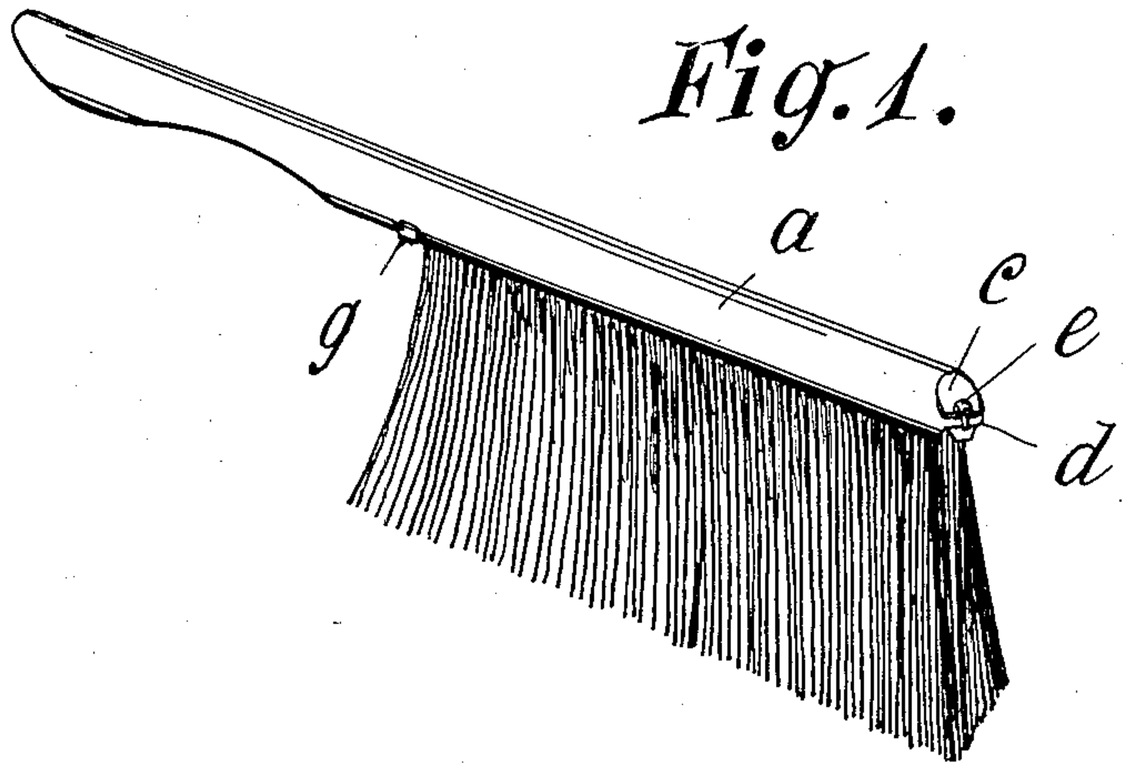


Fig. 2.

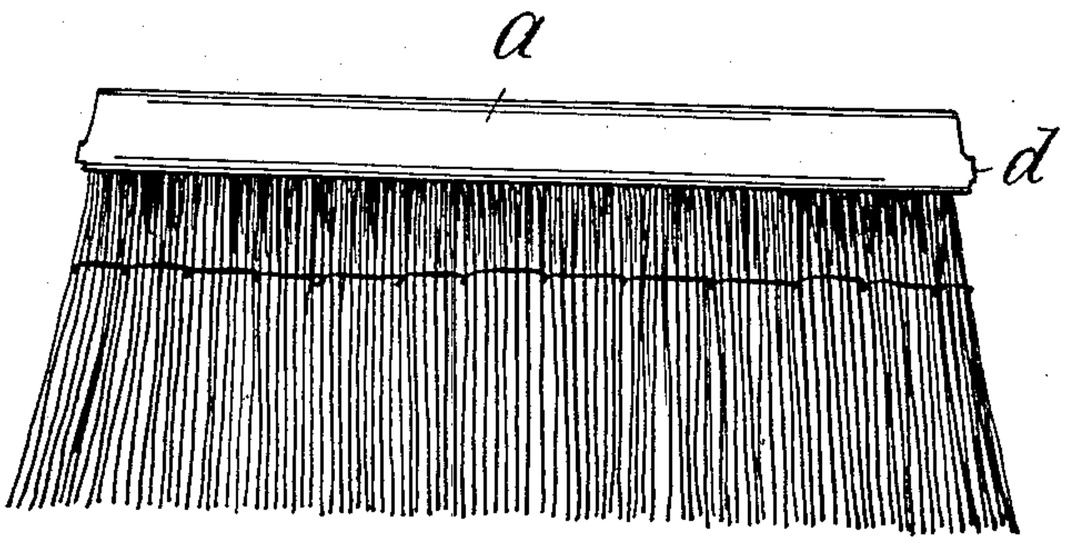


Fig. 3.

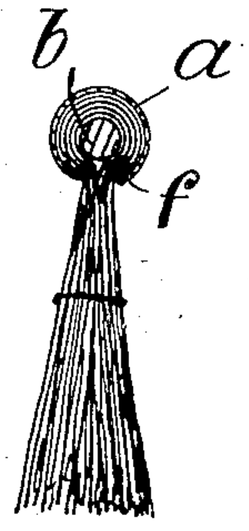
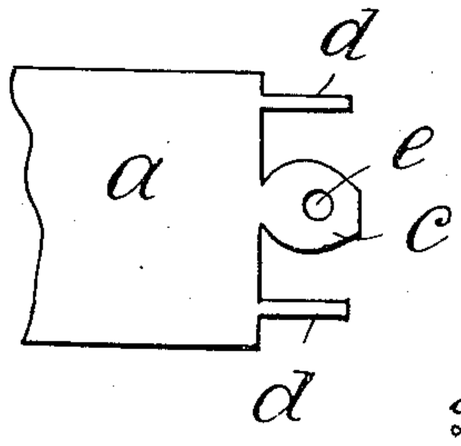


Fig. 4.



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2 SHEETS—SHEET 2.

Fig. 6.

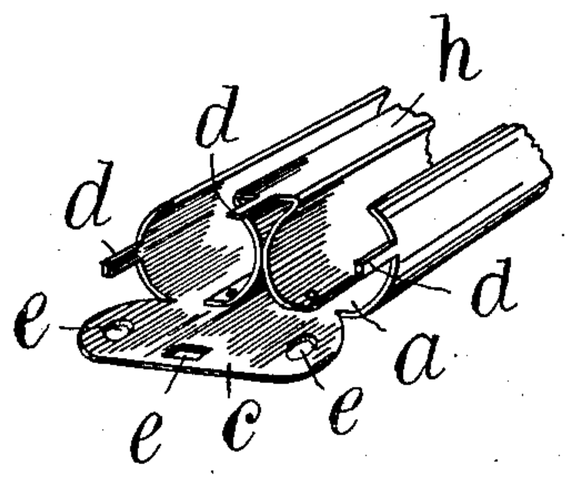
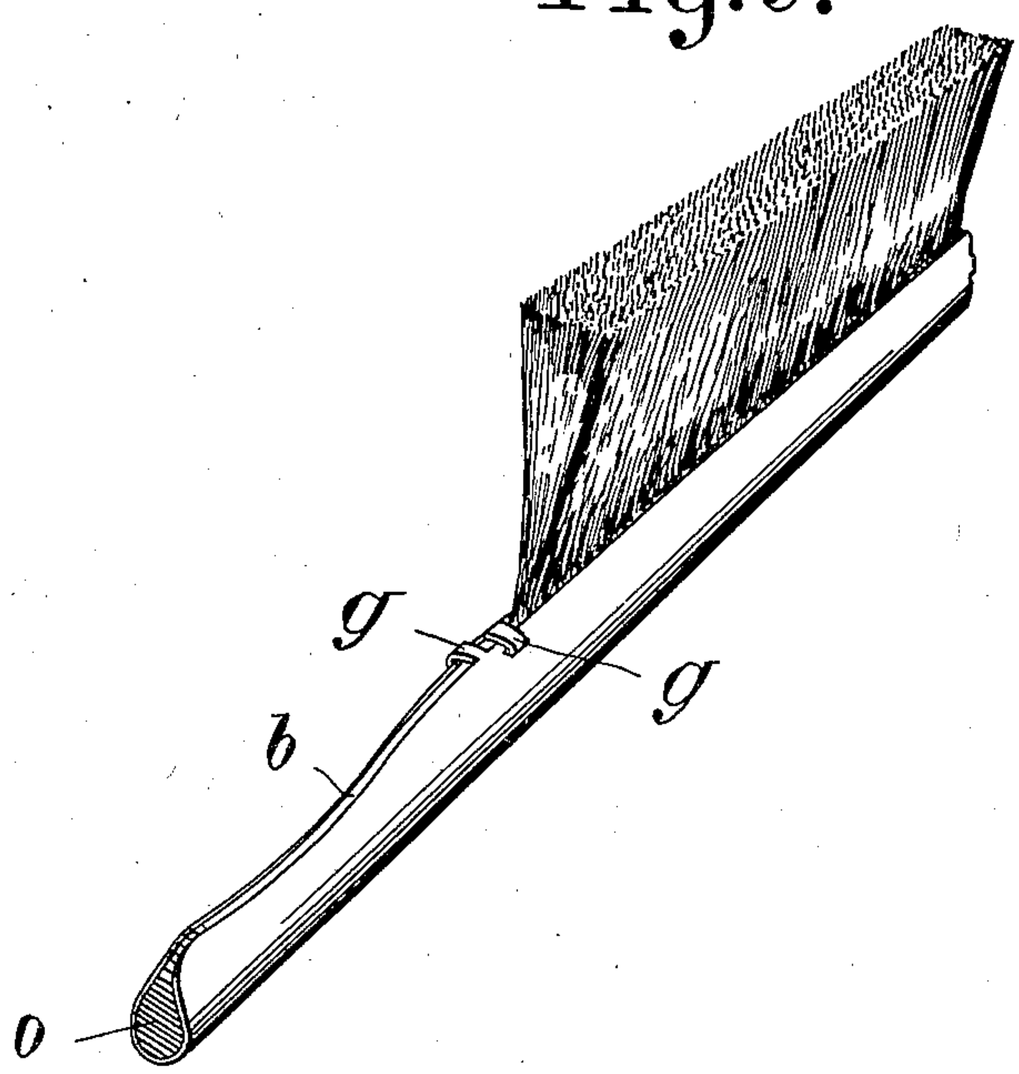


Fig. 5.



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UNITED STATES PATENT OFFICE.

LARS OLSEN EKREM, OF STRÓMSNESSET, NEAR KRISTIANSUND, NORWAY.

BRUSH.

No. 908,652. Specification of Letters Patent. Patented Jan. 5, 1909.

Application filed July 9, 1907. Serial No. 382,939.

To all whom it may concern:

Be it known that I, LARS OLSEN EKREM, a subject of the King of Norway, residing at Strómsnesset, near Kristiansund, Norway, have invented certain new and useful Improvements in Brushes and Brooms; and I 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in brushes and brooms in which the brush-holder or brushhead is made of sheet metal that has been bent to form a trough and between which and a core disposed within the bent metal the bristles are held.

The accompanying drawing shows several forms for carrying out the invention.

Figure 1 shows a perspective view of a simple hand brush. Figs. 2 and 3 show a side elevation and a cross section respectively of a ship's broom or scrubber made in accordance with the present invention. Fig. 4 shows the shape of the sheet metal blank at one end of the brushhead before being bent. Fig. 5 is another perspective view of the brush shown in Fig. 1, whereas Fig. 6 is a perspective view of the brush head having a double trough for the bristles.

I form the brushhead, in which the doubled bristles are held, by means of the core *b* disposed in the said head, from a sheet metal plate *a;* this plate is at one or both ends according to the shape of the brush formed substantially as shown in Fig. 4, where *c* is the part that forms the endpiece of the brushhead after the bending has taken place, and *d* are tongues that serve to hold the edges of the metal tightly against the bristles, said tongues being with their ends bent down into an aperture *e* in the endpiece *c* and, if desired driven into the core *b*. Along the edges the metal plate is bent, so as to form a stiff flange *f*, Fig. 3.

In brushes such as shown in Fig. 1 the core *b* is suitably extended into the handle filling it up and thereby making it stronger. At the rear end of the brush the metal plate is suitably provided with one or more tongues *g* that form binders to the opposite edge of the plate.

The brushes shown in the drawing are only provided with a single row of bristles. If broader brushes are desired, the plate is bent so as to form a double trough, (see Fig. 6) in which the bristles are fixed in the way shown in the drawing.

As seen in Fig. 6, the double trough is formed by a double curved piece *h* of sheet metal, which is riveted to the bottom of the trough in its longitudinal axis, thus dividing the trough into two. At the end of the piece *h* a tongue *d* is formed, adapted to pass through a corresponding aperture *e* in the end piece *c*.

The sheet-iron utilized for the brushheads described above, on being stamped and folded is given such a shape as to enable the bristles to be pressed more firmly together than if wooden brushheads are made use of.

The brushes may be made in all sizes, from the smallest to the largest, with one or more rows of bristles, according to the use they are intended for.

Claims.

1. A brush head formed from sheet metal in the shape of a trough, bristles held therein by a core, said trough having at its outer end an end piece and integral tongues, the latter forming binders between the end piece and the sides of the bent metal.

2. A brush head formed from sheet metal in the shape of a trough, bristles held therein by a core, said trough having at both ends an end piece and integral tongues, the latter forming binders between the end piece and the sides of the bent metal.

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

LARS OLSEN EKREM.

Witnesses:

W. ROUNING,

M. GRAM.