Aug. 31, 1926. 1,597,998

L. H. NIELSEN

BRISTLE RING

Filed May 15, 1924

Fig 1

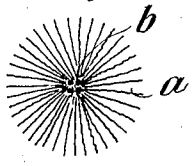


Fig 2



Fig 3

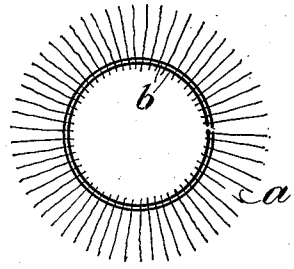


Fig 4

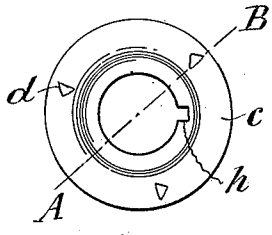


Fig 5



Fig 9

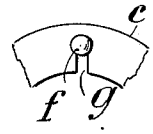


Fig 6

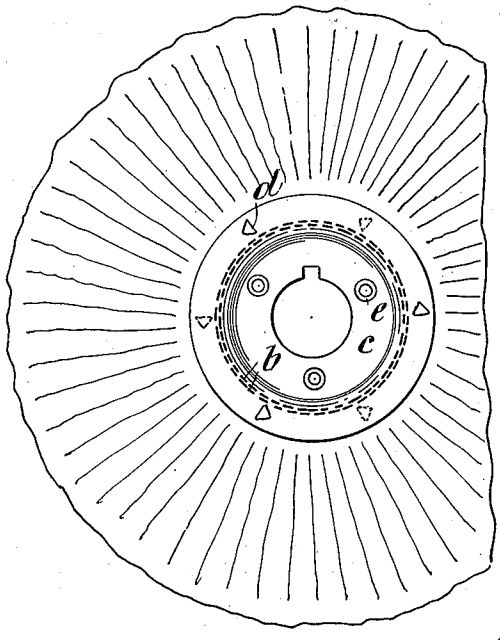


Fig 7



Fig 8



Fig 10



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UNITED STATES PATENT OFFICE.

LAURITS HENRIK NIELSEN, OF HOLTE, DENMARK.

BRISTLE RING.

Application filed May 15, 1924, Serial No. 713,521, and in Denmark November 29, 1923.

This invention relates to a bristle ring intended for use in the manufacture of cylindrical brushes which are built up from a suitable number of bristle rings mounted side by side on a suitable hub or shaft. To this end the improved bristle ring is composed of two circular sheet metal plates or disks so formed that their inner parts are contiguous while their outer parts are separated to afford a circular trough which is to be filled by a string of wired-together bristles, the said circular plates being provided near their peripheries with inwardly extending struck up pointed lugs which will engage the bristles, outside of the wiring, and thus hold them in place to form a complete bristle ring.

In the accompanying drawing Figs. 1 to 3, inclusive, illustrate the different steps in making up the bristle portion of the bristle ring. Fig. 4 is a side view of one of the circular metal plates or disks which form the central part of the bristle ring, and Fig. 5 is a section on line A—B, Fig. 4. Fig. 6 is a partly broken out side view of the completed bristle ring, and Fig. 7 is a diametric section thereof. Fig. 8 is a section of a tubular rivet or eyelet which may be used for attaching the circular metal plates or disks of the bristle ring together. Fig. 9 is a detail view showing a modified construction for attaching the circular metal plates or disks together, and Fig. 10 is a detail view of the rivet shown in Fig. 9.

Referring to the drawing, *c* denotes the circular metal plates or disks the inner parts of which are bent inward or toward each other so as to be contiguous, but the outer parts of which are separated from each other so as to form a circular peripheral trough for the reception of a string of bristles *a* doubled as shown more clearly in Fig. 2 and secured together by wires *b*. In assembling the bristle ring the wired-together bristles are first placed in the outer part of one of the circular plates or disks *c*, and the other or companion plate or disk *c* is then placed against the first-named plate or disk. Each of said plates or disks is provided, near its periphery, with a series of struck-out inwardly extending pointed lugs *d* which engage the bristles, outside of the wires *b*, and thus, when the said plates or disks are attached together, either by hollow rivets or eyelets *e* as shown in Fig. 8, or by rivets *f*, as shown in Figs. 9 and 10, the said bristles will be fixedly secured in place so that they cannot be displaced from the metal hub portion of the ring.

By reference more particularly to Fig. 7 it will be seen that the pointed lugs *d* are flat and are arranged edgewise radially of the ring so that they will penetrate the bristle ring without pinching or displacing the radially extending bristles of said ring.

In forming a cylindrical brush a proper number of the bristle rings, formed as described, will be mounted on a suitable hub or shaft extending through central openings such as are shown in Figs. 6 and 7, in the bristle ring.

It will therefore be understood that the invention provides a bristle ring which may be readily formed and assembled, and in which the bristle portion of the ring will be securely mounted so that it cannot be displaced.

Having thus described my invention I claim and desire to secure by Letters Patent:

A bristle ring, for use in building up a cylindrical brush, comprising two circular sheet metal plates or disks the inner parts of which are contiguous and secured together, and the outer or peripheral parts of which are separated to form a circular trough, combined with a string of wired-together bristles forming a bristle member filling said circular trough, said plates or disks being provided, near their peripheries and outside of the string of wired-together bristles, with flat, inwardly projecting pointed lugs struck out from said plates and engaging the bristle member to hold the said member in place, said lugs being arranged edgewise radially of the ring so as to engage the bristle member without pinching the bristles.

In testimony whereof I affix my signature.

LAURITS HENRIK NIELSEN.