

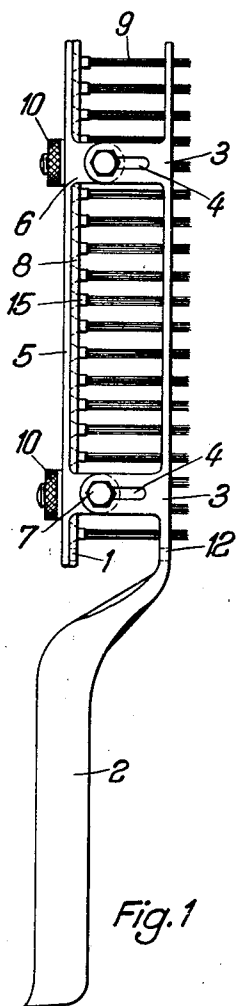
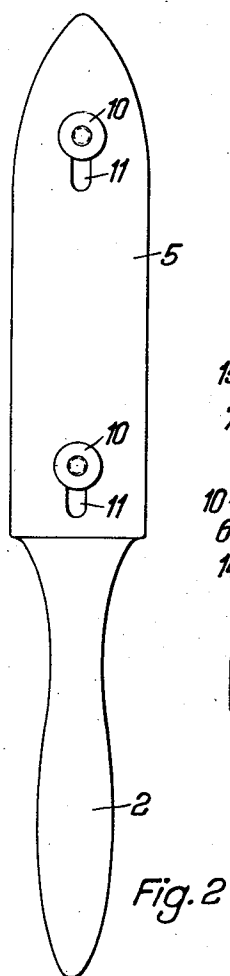
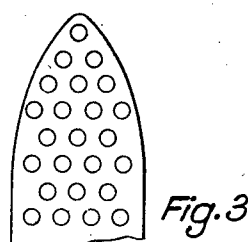
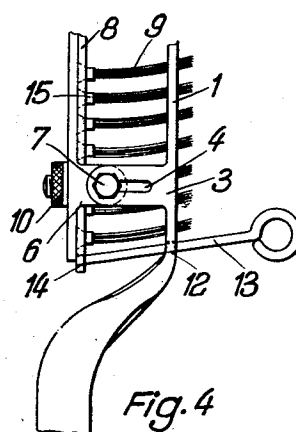
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WIRE BRUSHES

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WIRE BRUSHES

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2 Claims. (Cl. 15-169)

This invention relates to improvements in wire brushes. More particularly the invention relates to wire brushes in which the bristles are controlled by a guide and in which, by shifting of the bristle support relatively to the bristle guide, the bristles may be adjusted to any desired working angle and to the most effective bristle length.

Known wire brushes have the disadvantage that when used the bristles were partly bent over, as a result of which the brushing effect of the wire brush was greatly reduced.

These disadvantages are present also in rotating brushes. The bristles of hand wire brushes and of machine driven wire brushes are not always stressed uniformly, so that, as a result, the bristle tufts are often worn unevenly. When thus, in the case of the wire brushes known heretofore, individual tufts or rows of bristles were strongly worn, the whole brush became useless.

Furthermore, in the wire brushes hitherto known, there was no possibility of adjusting the brushes to any desired contour for the purpose of brushing shaped rods or shaped material in one stroke.

It is an object of this invention to provide wire brushes in which worn bristle tufts may be speedily replaced.

Furthermore, it is an object of the invention to adjust the effective length of bristle, as well as the working angle of the bristles, as desired, and for the highest degree of effectiveness.

According to this invention, the handling of the brush is done directly through the bristle guide, and also, by shifting the bristle-mounting support, the bristles are adjustable to any desired working angle.

The bristle-mounting support is therefore connected with the bristle guide by adjustable holding lugs and held by screws. Thus, the most effective bristle length may be adjusted for any given purpose. In addition, the bristles are interchangeable in tufts and it is therefore possible to insert extra hard bristles for certain special purposes, in particular in those places subject to greatest wear. Furthermore, bristle tufts of various wire thicknesses and hardness may be inserted as may be required. By grinding the brush, all the bristles can be given a definite length, thus distributing the cutting effect on all the bristles most uniformly.

In the accompanying drawings, in which one embodiment of the invention is shown by way of example only,

Fig. 1 is a side view of a hand wire brush;

Fig. 2 is a view of the top of a bristle-mounting support as shown in Fig. 1;

Fig. 3 is a view of part of the bristle guide provided with perforations;

Fig. 4 shows part of the wire brush according to Figs. 1 and 2 with bristles adjusted to a slanting position.

The hand wire brush according to Figs. 1, 2, 3, and 4 comprises a bristle guide 1 with handle 2, and a back 5 with a bristle-mounting support 8.

The bristle guide 1 is provided with holding lugs 3 with oval bores 4. Lugs 6, provided on the upper part of the bristle-mounting support with threaded holes, constitute counter lugs to the holding lugs 3. By means of screws 7 and the holding lugs 3 and 6, the bristle-mounting support is connected with the bristle guide, adjustable to any desired bristle length.

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The back of the brush consists, as mentioned above, of two parts, an outer plate 5 and an inner plate 8. The latter is provided with bores for accommodating bristle tufts 9. The bores correspond to the holes in the bristle guide 1. Plates 5 and 8 are held together by screws 10. The outer plate 5 has oval bores 11 for receiving the screws 10 in such a way that plate 8 can be moved parallel to plate 5 and to the bristle guide 1; by tightening screws 10, plate 8 can be secured in any desired position.

As shown in Figs. 1 and 4, the bristle guide 1 is provided with a bore 12. A lever pin 13, shown in Fig. 4, extends through bore 12 into a bore 14 of the inner plate 8 of the bristle-mounting support. By means of the lever pin 13, the desired slant of the bristles can be adjusted by shifting the bristle-mounting support. The bristle tufts 9 are individually replaceable and each bristle tuft is held in a hollow rivet-like socket 15 (Figs. 1 and 4).

I have described and shown in the drawings a specific embodiment of my invention.

However, it should be understood that this embodiment was given by way of illustration and not of limitation and that many changes of structural features and their arrangement may be made without departing from the spirit of the invention.

What I claim is:

1. A heavy duty wire brush comprising a bristle-mounting support and a bristle guide, said support consisting of a back plate and an inner plate; said inner plate being movable parallel to said back plate and to the bristle guide, and having holes for accommodating and holding in place rivet-like bristle-receiving sockets; individual wire bristle tufts rigidly arranged in said sockets; said bristle guide having holes corresponding to the socket-accommodating holes and being spaced therefrom for receiving said bristle tufts near their free ends and being adjustable longitudinally of said tufts; and means in said brush for moving said inner plate and therewith said bristle-receiving sockets with respect to said back plate and to said guide, and means for clamping said inner plate in adjusted position.

2. A heavy duty wire hand-brush comprising a bristle-mounting support and a bristle guide, said support consisting of an outer and an inner plate, said inner plate being movable parallel to said outer plate and to said bristle guide, and having holes for accommodating and holding in place rivet-like bristle-receiving sockets, said holes forming rows in staggered relationship to each other; individual wire bristle tufts rigidly arranged in said sockets; said bristle guide having holes, corresponding to the socket-accommodating holes, and being spaced therefrom for receiving each individual bristle tuft near the free end thereof and being adjustable longitudinally of said tufts; means in said brush for moving said inner plate and therewith said bristle-receiving sockets with respect to said outer plate and said guide, means for securing said inner plate in adjusted position, and a handle connected with and arranged directly on said bristle guide.

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