

P. FELKER.  
BRUSH WHEEL.

No. 102,932.

Patented May 10, 1870.

Fig. 1

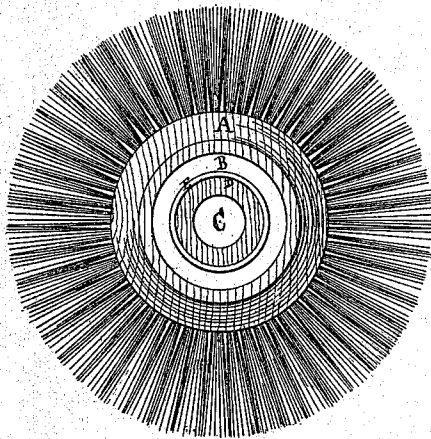
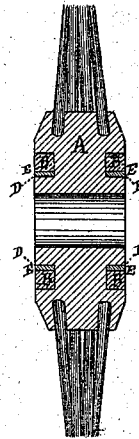


Fig. 2.



Witnesses.

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# United States Patent Office.

PHILIP FELKER, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 102,932, dated May 10, 1870.

## IMPROVED BRUSH-WHEEL.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, PHILIP FELKER, of the city and county of Providence and State of Rhode Island, have invented a new and useful Brush-Wheel.

My invention relates to that class of brushes in which the bristles are set in the edges of disks of wood, and which are generally employed for polishing metals, &c.

It consists in forming in the body of the wheel, and upon each side near the eye, a groove, in such a manner as to leave recessed shoulders around the eye, upon which shoulders metallic sleeves are placed, for a purpose to be hereafter explained.

And I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which the invention pertains to make and use the same, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 is a side view of a brush-wheel constructed in accordance with my invention, and

Figure 2, a cross vertical section of the same.

Similar letters of reference indicate corresponding parts in both figures.

In the drawings—

A represents the body of the wheel.

B, in each case, represents grooves made in the body A, upon each side and near the eye.

C is the eye of the wheel, of a size corresponding with that of the arbor upon which the wheel is to be mounted.

D, in each case, represents recessed shoulders, formed around the eye C by the grooves B.

Instead of making grooves in the body of the wheel to form the shoulders for the support of the sleeves, a projecting flange might be made around the eye to serve a similar purpose. I prefer, however, the former plan, it being economical in material.

E, in each case, represents the metallic sleeve or sleeves, encircling and resting upon the shoulders D, after the manner of a wheel tire.

It will be seen that by the employment of the sleeve or sleeves in the manner I have shown, the warping and cracking of the wheel, which so often occasions great inconvenience, is prevented.

In cases where a brush-wheel is mounted upon an arbor, and nuts and washers are required to hold it in place, they being placed upon each side, the continuous pressure of these nuts and washers against the body of the wheel, often cause it to crack and become useless, sometimes when the bristles are only slightly worn.

By providing the body of the wheel with the sleeves they receive all the strain, the pressure being against them when the wheel is in position upon the arbor.

If the wheel be mounted upon the end of an arbor, provided with a screw-thread, fitting the eye C, as is generally the case, there is a constant outward strain liable to crack the wood, and render the brush-wheel worthless.

A partially satisfactory result follows the use of a single sleeve, although, as the expense is trifling, I prefer both, as shown.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The improved wooden brush-wheel herein described, consisting of the body A, provided with the metallic sleeve or sleeves E, fitted to recessed or projecting shoulders on the face or faces of the wheel, substantially as shown and described

PHILIP FELKER.

Witnesses:

HENRY MARTIN,  
JOHN C. PURKIS.