

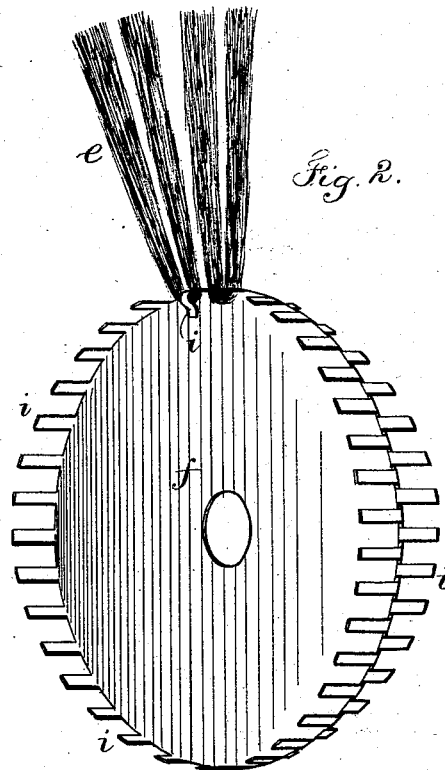
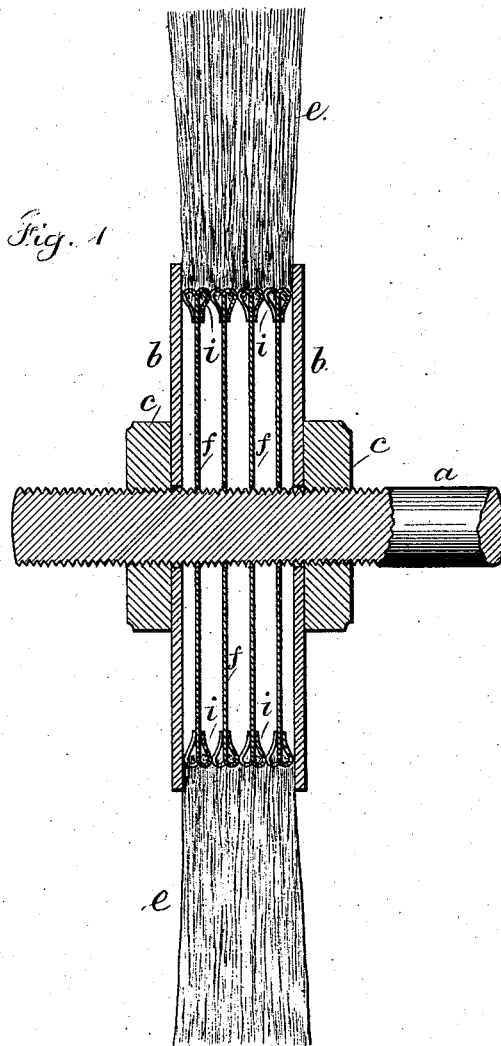
(No Model.)

H. E. FOWLER.

BUFFING WHEEL.

No. 260,558.

Patented July 4, 1882.



*Witnesses*

*Chas. H. Smith*  
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*Harbert E. Fowler*  
*per Lemuel W. Lovell*  
*att'y*

# UNITED STATES PATENT OFFICE.

HERBERT E. FOWLER, OF NEW HAVEN, CONNECTICUT.

## BUFFING-WHEEL.

SPECIFICATION forming part of Letters Patent No. 260,558, dated July 4, 1882.

Application filed January 9, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT E. FOWLER, of New Haven, in the State of Connecticut, have invented an Improvement in Buffing-Wheels, of which the following is a specification.

Buffing-wheels have been made of disks of cloth clamped together, so as to present the ends of the fibers to the article to be cleaned or polished. In these the threads do not occupy a radial position, and the warp or weft threads that do not approximate a radial position are not clamped and they fray out, the wheel is not truly cylindrical, and it wears out with rapidity.

My invention is for the purpose of rendering the wheel entirely uniform and much more durable and less expensive than heretofore.

I employ cords or threads instead of disks of cloth, and secure them firmly by looping them around hooks upon metal disks, and these disks and bunches of cords are clamped upon the shaft of the buffing-wheel, so that the cords or threads fly out radially when in use and their points will wear down gradually. The cords or threads hold the cleaning material—such as pumice or rouge—and when in use act with a powerful rubbing action against any surface that is to be buffed or polished.

In Figure 1 I have represented a vertical section of a buffing-wheel complete, and in Fig. 2 a perspective view of one of the base-plates and its hooks with bunches of cords or threads applied to some of the hooks.

The shaft *a* of the buffing-wheel is adapted to receive the followers *b b* and clamping-nuts *c*, of usual character.

The polishing-surface is composed of cords or threads *e* looped around one or more circular ranges of hooks, *i*, and clamped, the cords or threads being radial, or nearly so.

The hooks *i* may be separate wires or tacks introduced into the face of a wooden disk; but I prefer and use one or more base-plates, *f*, of sheet metal, with the hooks *i* formed of radially-cut tongues turned over laterally and at right angles, or nearly so, to one or both faces of the disk, and then the ends bent down after the bunches of threads or cords are looped around the same.

It is to be understood that the buffing-wheel is made up of one or more of these base-plates and the radial cords or threads in bunches, and that the followers and clamps aid in holding the bunches of fibers firmly at their inner ends.

The metal base-plates with the hooks around the peripheries, although especially adapted to buffing or polishing wheels made of cords or threads, may be used with bunches of fiber—such as hemp, bristles, or similar materials—laid around such hooks in the form of loops, and secured by bending down the ends of the hooks, and such bunches of fibers may be tied with a binding-thread after being looped around the hooks.

I am aware that bunches of fiber have been laid into slots or notches in metallic disks or rings. In these cases the fold of the loop of fiber is in a plane parallel to the axis of the shaft.

In my improvement the loops of fibrous material are laid in a plane that is at right angles to the axis of the brush, and spread out radially. Hence a brush or polishing-wheel can be made much more dense and contain a larger quantity of fibrous material than heretofore, and the same is held firmly at the folds of the loops by the hooks on the plates bent down to retain the loops.

I claim as my invention—

1. The base-plate for a buffing-wheel, made of a disk with hooks at its periphery, in combination with bunches of fibrous material looped around such hooks, substantially as set forth.

2. The base-plate for a buffing-wheel, made of a metal disk having hooks projecting at opposite sides around its edges, in combination with bunches of fibrous material looped around the hooks, substantially as set forth.

3. In a buffing-wheel, the combination, with followers or clamps of metal disks, having hooks around their edges and bunches of cords or threads looped around the hooks, substantially as set forth.

Signed by me this 3d day of January, A. D. 1882.

HERBERT E. FOWLER.

Witnesses:

DEXTER R. WRIGHT,

ARCHIE G. HOHENSTEIN.