

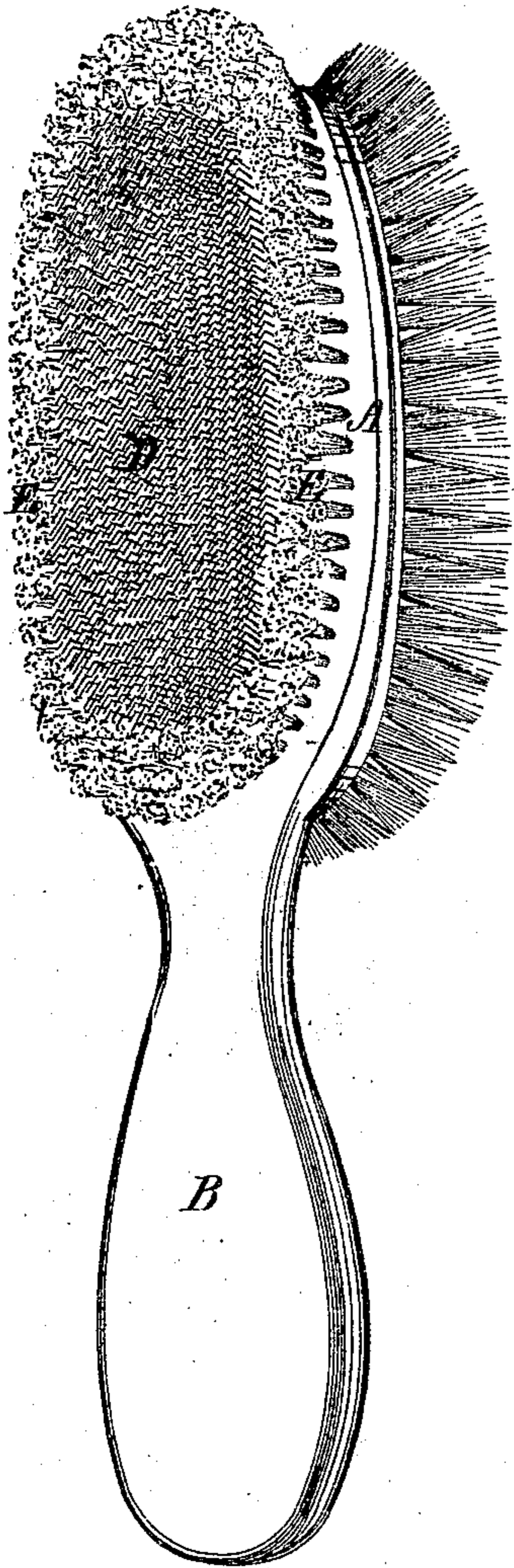
*S. M. Fierly,*

*Hair Brush.*

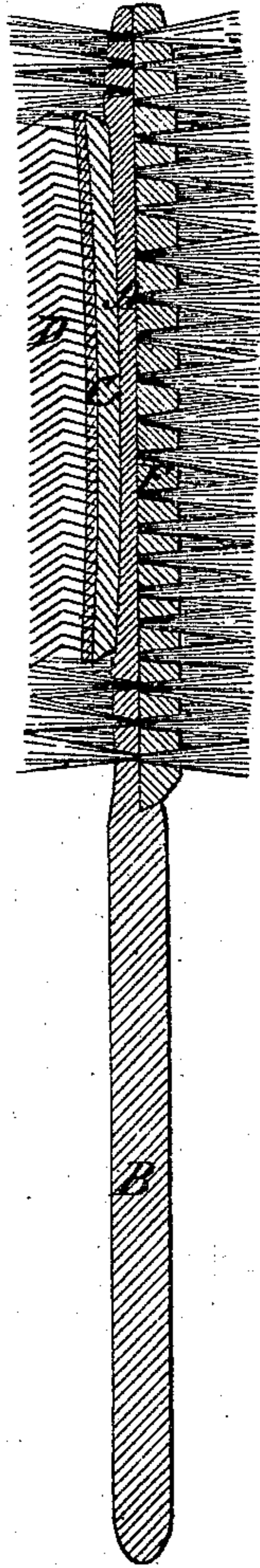
*No. 106,680.*

*Patented Aug. 23. 1870.*

*Fig. 1.*



*Fig. 2.*



Witnesses

*J. W. Hamilton Johnson  
French St. Moix.*

Samuel M. Fierly, Inventor.

*By his Attorneys,  
Apperman & Johnson.*



# United States Patent Office.

SAMUEL M. FIREY, OF CLEAR SPRING, MARYLAND.

Letters Patent No. 106,680, dated August 23, 1870.

## IMPROVED HAIR-BRUSH.

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, SAMUEL M. FIREY, of Clear Spring, in the county of Washington and State of Maryland, have invented a certain new and useful Improvement in Hair-Brushes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing which makes part of the same, and in which—

Figure 1 represents a view, in perspective, of a brush embracing my improvements; and

Figure 2 represents a vertical longitudinal section through the same, showing the central wire-toothed section, as also a brush of ordinary construction attached to the back, and forming part of my improved brush.

My invention relates to hair-brushes; and

It consists in constructing the same with a central section of fine steel-wire teeth, and surrounding said teeth with a border of bristles, whereby an acting surface is obtained, which effectually cleanses the scalp, produces thereon a healthful irritation and glow, and the brush permanently retains its elasticity.

In the accompanying drawing—

The stock or body A of the brush is of the usual construction, and is provided with the ordinary handle B by which to grasp it.

A central block or bed-piece, C, of dimensions less than the body A, is attached to said body in any convenient manner, and the wire teeth D, which may be of a less length than the border of bristles surrounding them, are secured upon or through said bed-piece. They are of very fine wire, and are not arranged in bunches or clusters as bristles, but are disposed regularly and in parallel lines running in the direction of the length of the brush. They are also arranged in the bed-piece as that their acting surface is of a concave form, to more evenly accommodate themselves to the curvature of the head, and are bent at an obtuse angle toward the handle of the brush, which has the effect of presenting their acting surfaces obliquely to the scalp, while the greater elasticity imparted to them by being so bent avoids the scratching which would otherwise attend their use.

Surrounding this section of wire teeth, and extending therefrom to the outside of the brush, one or more rows of bristles, E, are arranged and secured to the body or stock of the brush in any approved manner. They have a projection a little greater than the wire teeth, and serve to guide the latter in their action upon the scalp, by reason of their sustaining a part of the pressure upon the brush by the hand of the user.

By this combined arrangement of a central section of elastic wire teeth within and bordered by one or more rows of bristles, a brush is produced which possesses the requisite degree of stiffness to perform the work usually done by a fine-toothed comb, without any of its injurious effects.

A brush with a central section of wire teeth, therefore, is not only invigorating to the scalp, but is very durable, and always retains the same elasticity.

To the back of the body A of the brush a second stock, F, is glued or otherwise secured, carrying bristles of the ordinary construction, which can be used when the other is not desired.

Instead of a central section of wire teeth surrounded by a bordering of bristles, as described, they may be arranged in alternate circular rows, or in parallel lines, in either of which cases the results and advantages above stated are apparent.

The bed-piece C may be provided with a copper plate, in which the wire teeth are secured, and the latter may be galvanized, in order to produce an electric action upon the scalp.

The bordering of bristles also serves to protect the steel teeth from injuring furniture, &c.

Having described my invention,

I claim—

The combination of the irritating section of wire teeth D with the bordering of bristles E, in the manner and for the purpose herein shown and described.

In witness whereof I have heretunto signed my name.

SAMUEL M. FIREY.

Witnesses:

JOHN S. FIREY,  
I. A. WRIGHT.