

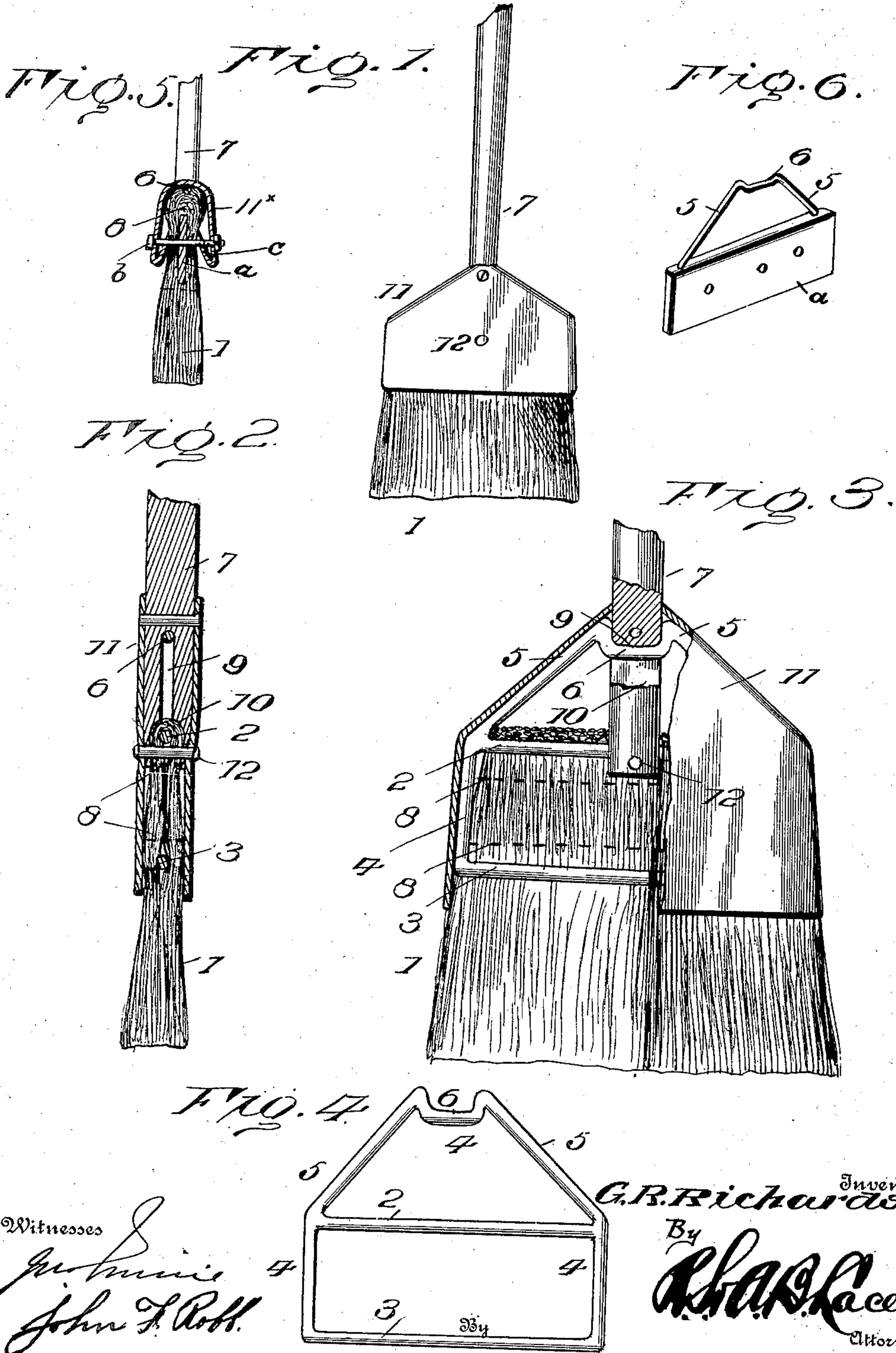
No. 699,348.

Patented May 6, 1902.

G. R. RICHARDSON.  
BRUSH.

(Application filed May 11, 1901.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

GEORGE R. RICHARDSON, OF LEON, WISCONSIN.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 699,348, dated May 6, 1902.

Application filed May 11, 1901. Serial No. 59,866. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE R. RICHARDSON, a citizen of the United States, residing at Leon, in the county of Monroe and State of Wisconsin, have invented certain new and useful Improvements in Brushes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the construction of brushes, brooms, mops, and the like comprising a handle and a tufted head, and has for its object security in the attachment of the brush material to the head or frame, as well as to simplify and cheapen the manufacture of articles of this type.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a brush constructed in accordance with and embodying the essential features of this invention. Fig. 2 is a transverse section. Fig. 3 is a view similar to Fig. 1, parts being broken away. Fig. 4 is a side view of the frame to which the brush material is secured. Fig. 5 is a transverse section of a modified construction of brush. Fig. 6 is a perspective view of a modified form of brush-head.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The head to which the brush material 1 is secured consists, preferably, of a frame comprising longitudinal bars 2 and 3, end bars 4, and convergent bars 5, having a depression or crimp 6 at the apex or angle to embrace opposite sides of the handle 7 when the parts are assembled. This frame is of skeleton formation and is preferably constructed of wire of suitable gage. The brush material 1, of any fibrous stuff commonly employed

in articles of this type, is doubled upon itself, the bar 2 lying in the folds and the end portions coming upon opposite sides of the bar 3. Parallel rows of stitching 8 secure the folded portions of the brush material upon opposite sides of the frame and hold it in place and by preference the rows of stitching are parallel with and come between the bars 2 and 3. The stitching may be substituted by fastening means of any nature which will firmly unite the folded parts of the material 1. It is contemplated to have the bar 3 come between rows of stitching.

The handle 7 is provided at its attaching end with a kerf 9 and a notch 10, the latter receiving the folded end of the brush material and the kerf 9 permitting the crimped portion 6 of the brush-head to enter the handle a sufficient distance to make firm connection therewith, the side portions of the crimp 6 embracing opposite sides of the handle at the inner end of the kerf 9, so as to brace the same in a plane parallel with the brush-head. A cap 11, of tapering formation and having its sides flattened, is attached to the end of the handle 7 and receives the upper portion of the brush-head and conceals the upper part of the frame and the folded part of the brush material and gives a neat and finished appearance to the article as a whole. A fastening 12 connects the separated parts of the handle 7 and passes through the folded part of the brush material and holds the head to the handle.

From the foregoing it will be readily understood that a brush, mop, broom, or analogous article may be advantageously constructed in accordance with the principles of this invention and that the brush material may be readily replaced by the average person, thereby obviating the cost incident to procuring a new article.

The brush-head, as shown most clearly in Fig. 6, may comprise a single bar *a* and convergent bars 5, with the depression or crimp 6 at the apex. This bar *a* is of wood and the brush material 1 folded therearound, as shown most clearly in Fig. 5, the folded portions being secured against the sides of the bar *a* by bolts *b* or kindred fastenings. The cap 11<sup>x</sup> has the lower edge portions of its sides inwardly bent, as shown at *c*, so as to embrace

the sides of the brush material opposite the bar *a*, the cap and parts being secured together by the bolts or fastenings *b*, which pass through coincident openings therein.

5 Having thus described the invention, what is claimed as new is—

1. In a brush, a handle having a kerf extending therein from one end, and a brush-frame fitted in the said kerf and having a depression in its edge to receive and embrace  
10 opposite sides of the handle in line with and adjacent the inner end of the said kerf, and means for connecting the parts of the handle separated by the kerf and clamping the  
15 brush-frame therebetween, substantially as set forth.

2. In a brush, a handle having a kerf formed therein at one end, a frame comprising spaced

bars and having a portion crimped to form a depression, brush material folded about said  
20 spaced bars and secured thereto, the crimped portion of the frame entering the kerf of the handle and embracing opposite sides thereof and the folded part of the brush material fitting in a notch in the end of the handle and  
25 means for connecting and clamping the separated parts of the handle against opposite sides of the brush-frame, substantially as set forth.

In testimony whereof I affix my signature  
30 in presence of two witnesses.

GEORGE R. RICHARDSON. [L. S.]

Witnesses:

W. A. JONES,

CHR. A. ERRICKSON.