July 22, 1930. J. F. PALMER 1,771,189

BRUSH

Filed Nov. 8, 1928

Fig. 1.

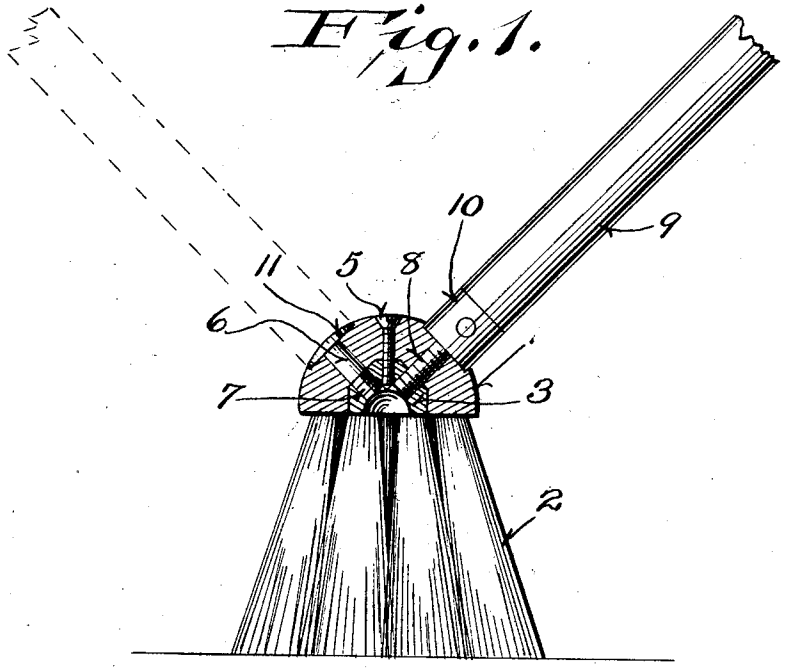


Fig. 2.

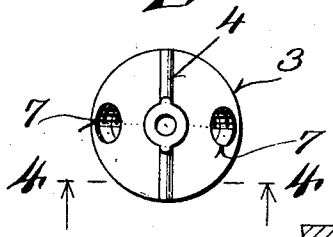


Fig. 3.

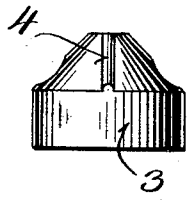
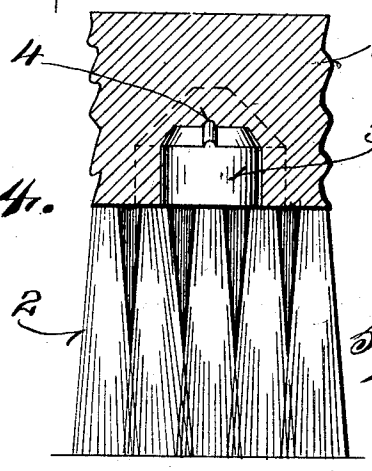


Fig. 4.



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UNITED STATES PATENT OFFICE

JOHN FREDERICK PALMER, OF MILWAUKEE, WISCONSIN

BRUSH

Application filed November 8, 1928. Serial No. 317,938.

This invention relates to brushes.

Objects of this invention are to provide a simple, cheap, and durable form of brush which is equipped with a reversible handle, so that the brush may be used from either side, thus insuring an even wear and an extended use or service for the brush.

In brushes as heretofore constructed, it has been the usual practice to thread the wooden handle and screw these wooden threads into the wooden head of the brush. The result is that the threads become loose and quickly wear, thus causing a loose fit and discouraging changing of the handle from one side to the other. The result of this is that the brushes are frequently used without changing the handles, due to the disadvantage noted above, and the life of the brush is materially shortened, as it is not worn symmetrically from both sides.

This invention is designed to overcome the defects noted above, and further objects are to provide a metal threaded member or block which is positioned within the wooden head of the brush and which receives metal screw-threaded pins carried by the handle, so that the handle may be changed from one side to the other, as often as desired, without any danger whatsoever of excessive wear and loosening.

An embodiment of the invention is shown in the accompanying drawings in which:

Figure 1 is a sectional view through the brush;

Figure 2 is a top view of the metal block removed from the head of the brush;

Figure 3 is a side elevation of the structure shown in Figure 2;

Figure 4 is a sectional view through the brush taken at right angles to Figure 1 and approximately on the line 4—4 of Figure 2.

Referring to the drawings, it will be seen that the brush comprises a wooden head 1 which carries bristles 2. This wooden head is bored out to provide a cylindrical recess terminating in a conical recess which receives a similarly shaped metal block 3. This metal block 3 is, as stated, provided with a cylindrical and a conical portion to accurately fit the bored out part of the head. The conical portion is provided with a pair of diametrically opposite ribs 4 which are forced into the wood of the head when the block is drawn or driven into place. The block is held in place by means of a screw 5 countersunk in the wooden head 1 and threaded into the block, as shown most clearly in Figure 1.

The head is provided with apertures 6 extending angularly inwardly from opposite sides, and the block 3 is provided with threaded apertures 7 aligning with the apertures 6. These threaded apertures are adapted to receive the metal screws or threaded pins 8 carried by the handles 9. These handles are provided with metal reenforcing ferrules 10 at their ends which bear against flat faces formed in the sides of the brush, as indicated at 11. These faces are formed by boring out a part of the brush, as shown in Figure 1.

It is apparent that the handle may be readily screwed into the metal block, the metal screw 8 and the metal block being the threaded portions and thus wear is reduced to an inappreciable value.

The handle may be reversed as many times as desired, without loosening. The screw and metal block withstand this interchanging for a greater period than the life of the brush, so that there is no possible chance of a poor fit after extended use.

Further, the flat inner end of the handle is bound against the face 11 of the head of the brush and a secure and rigid joint is obtained.

Although the invention has been described in considerable detail, such description is intended as illustrative rather than limiting as the invention may be variously embodied and as the scope of such invention is to be determined as claimed.

I claim:

A brush head having a flat surface and a conical recess opening onto the flat surface, said brush head having an aperture leading into the recess, a conical block adapted to fit into the said recess, ribs on the block adapted to engage the head, a screw member passing downwardly through the head and engaging the block to retain the same in the recess, said

block having a threaded aperture adapted to be aligned with the aperture in the head, a handle member and a threaded pin carried by said handle and adapted to be inserted through the aperture in the head, and screwed into the threaded aperture in the block.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin.

JOHN FREDERICK PALMER.