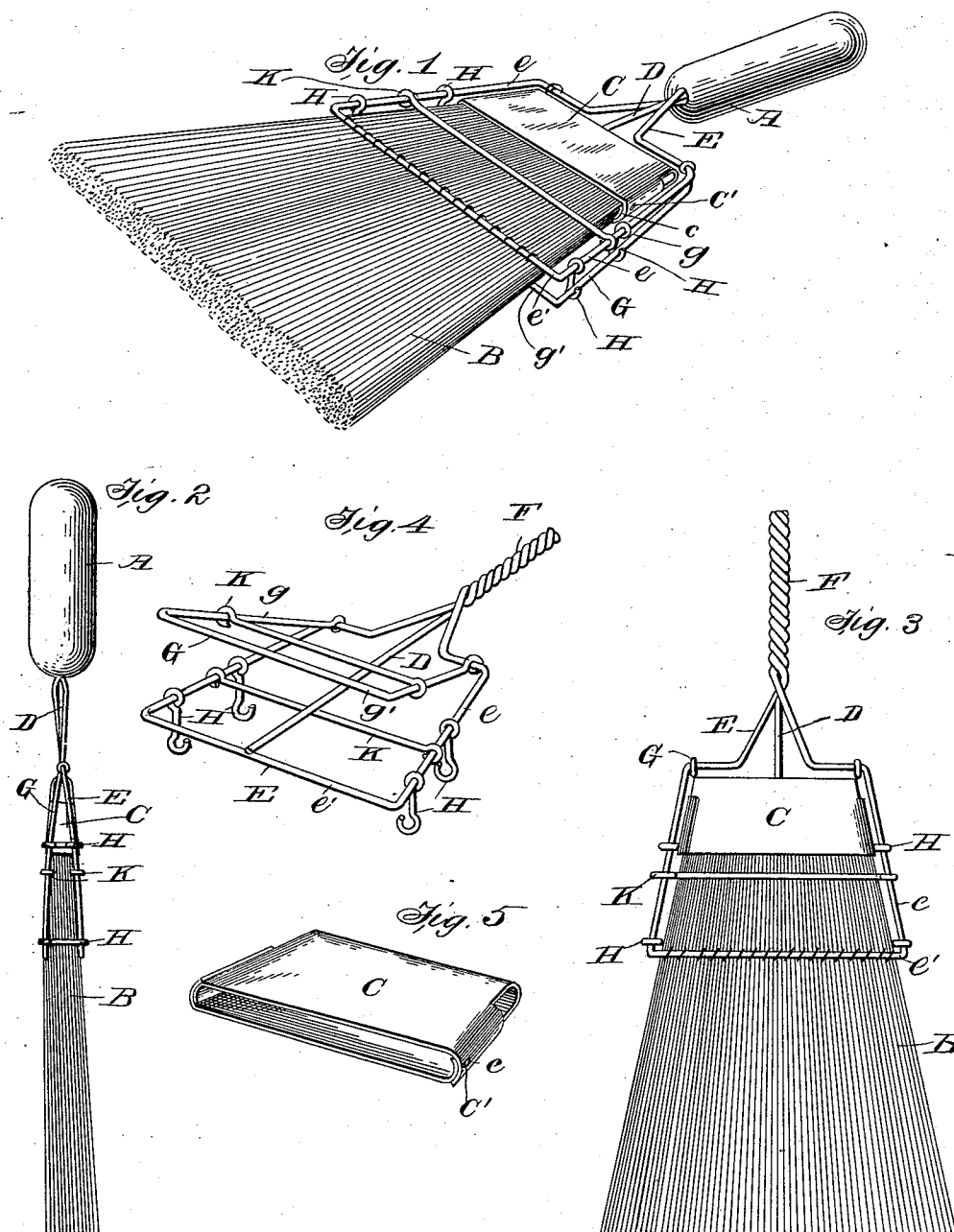


(No Model.)

A. McP. SANDERS.
BROOM.

No. 477,782.

Patented June 28, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

ALFRED MCPHEETERS SANDERS, OF MORRISTOWN, TENNESSEE.

BROOM.

SPECIFICATION forming part of Letters Patent No. 477,782, dated June 28, 1892.

Application filed July 16, 1891. Serial No. 399,747. (No model.)

To all whom it may concern:

Be it known that I, ALFRED MCPHEETERS SANDERS, a citizen of the United States, residing at Morristown, in the county of Hamblin and State of Tennessee, have invented certain new and useful Improvements in Brooms; 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.

My invention relates to an improvement in brooms; and it consists in the certain peculiar features of construction and arrangement of parts more fully hereinafter described, and definitely pointed out in the claims.

The aim and object of my invention is the provision of an improved broom which will firmly retain the brushes in place and permit of their placement with but slight trouble and, also, to arrange the attaching portions so that the handle can be quickly secured in place at a minimum expense and at the same time constitute an elastic or yielding connection between the handle and broom-head. These objects I attain by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate like parts in the several views, and in which—

Figure 1 is a perspective view of my improvement. Fig. 2 is a side elevation. Fig. 3 is a front elevation with the handle removed. Fig. 4 is a perspective view of the frame, and Fig. 5 is a detail view of a cap.

In the drawings, A represents the handle and B the brush, the latter having its upper end secured in a suitable metallic cap C, formed of a single piece of metal bent down to form the sides and its side edges being extended out and bent around to overlap each other, as at c. Through the overlapping ends of the cap rivets C' are placed to secure the same together. In the center of the top of the cap C is formed an aperture, through which a vertical stiffening-rod D passes, its lower end extending down some distance below the cap in the center of the brush.

E represents a metallic frame having outwardly-diverging side bars e, a curved cross-bar e' at its lower end extending across the brush. The upper ends of the side bars e are bent at right angles inward at points immediately above the cap C, their inner portions

above the cap being bent obliquely upward and inward in contact with the upper end of the stiffening-rod. At the point of contact of the ends of the side bars and stiffening-rod the three members are twisted spirally to form a screw-shank F and to closely unite their ends.

Hinged at its upper ends to the horizontal portion of the frame E is a frame G, having side bars g and a cross-bar g', similar in shape to those of frame E, the hinged connection being made by bending the wire of the side bars g into loops, through which the side bars e pass. The cross-bars of these frames are held parallel by the position of the hinges, which prevents frame G from slipping down the side bars of frame E.

H are a series of hooks slidably pivoted on the side bars e and having their hooked ends engaging the side bars g. These hooks are preferably placed at the middle and lower ends of the side bars, and serve to unite the lower parts of the frame after the brush has been placed between.

K are cross-bars secured to side bars of the respective frames and extending across the same to form supports for the sides of the brush between the cross-bars and cap. These rods may be rigid on the frame or slidably secured.

The lower end of the stiffening-rod extends below the cross-bars of the frames, so that the same will press against the cross-bars or the intervening brushes when the broom is being used, thereby stiffening the broom-head.

If desired, the brush may be secured in place by passing cord or twine over the cross-bars and through the brush.

When the brush is to be placed in the head, the hooks are disengaged from the frame G, the latter swung up, the cap withdrawn, and the end of the brush inserted in the cap. The cap is then placed between the frames, the stiffening-rod passing through the same, and the frame G lowered onto the brush. The lower hooks are then placed over the side bars g and moved down to points near the ends of the frames, thereby drawing the frames together and binding the brush between the cross-bars and cross-rods. The remaining hooks are then secured in place.

In forming the attaching portion as de-

scribed it is only necessary to screw the shank F into the end of the broom-handle, which can be done with but little or no trouble. The inclined portions of the bars *e* above the
5 cap form a yielding connection between the handle and brush, so that less exertion is required in sweeping.

The stiffening-rod may in many cases be dispensed with; but in the formation of the ordinary broom it is preferred.

I am aware that many minor changes in the arrangement and construction of the parts of my device can be made and substituted for those herein shown and described
15 without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

20 1. A broom-head consisting of two wire frames having parallel side bars and hinged together, a cap between the frames, in which the end of the brush is placed, a spiral shank formed by the united ends of one of the
25 frames, cross-bars at and between the ends of the frames, and sliding hooks pivotally se-

cured to the side bars of one frame and removably engaging the bars of the other frame, substantially as described.

2. In a broom, the combination, with a brush, of a frame having its ends extending up and toward each other above the center of the brush, a stiffening-rod passing into the brush, a screw-shank formed of the united ends of the frame and stiffening-rod, and
35 means for uniting the brush to the frame, substantially as described.

3. In a broom, the combination, with a brush, of a cap for the ends of the brush, a frame extending above the brush, a stiffening-rod passing through the cap into the brush, a shank formed by the ends of the frame and stiffening-rod, a frame hinged to the other frame on the opposite side of the brush, and hooks uniting the lower ends of
45 the frame, substantially as described.

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

ALFRED MCPHEETERS SANDERS.

Witnesses:

E. J. WELLS,
C. GOODSON.