D. C. M. BARNEY.
Manufacture of Brooms.

No. 212,785. Patented Mar. 4, 1879.

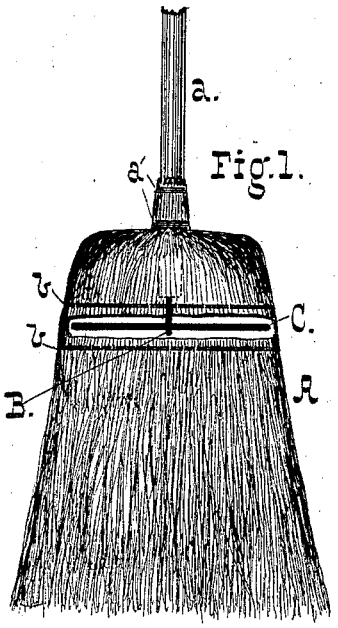

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

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DAVID C. M. BARNEY, OF HEBRON, INDIANA.

IMPROVEMENT IN THE MANUFACTURE OF BROOMS.

Specification forming part of Letters Patent No. **212,785**, dated March 4, 1879; application filed December 3, 1878.

To all whom it may concern:

Be it known that I, DAVID C. M. BARNEY, of Hebron, Porter county, State of Indiana, have invented certain new and useful Improvements in the Manufacture of Brooms; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a plan of the broom, a part being broken away to show the position of the brace. Fig. 2 represents the lower end of the broom-handle. Fig. 3 is a plan view of the brace, and Fig. 4 a similar view of the needle for inserting the latter.

The objects of my invention are to lessen the labor involved in manufacturing brooms, to economize in straw, and to incidentally produce a stiffer and better broom than has heretofore been made by the processes in use. These results are attained by the insertion, within the broom, above the lower line of stitching, of a brace, preferably metallic, and arranged and operating as hereinafter set forth.

In the accompanying drawings, A represents the broom, and *a* its handle, to which latter the straw is secured by wire, in the usual way. In the lower end of the handle is inserted a hook, B, which is arranged to occupy a position at right angles to the plane of the broom and between the lines of stitching *b b*.

When the broom is formed and ready for pressing, the needle D (see Fig. 4) is thrust through it from side to side. The brace C is then inserted in the socket *d* in the base of the needle, and the latter is pushed completely though the broom, the brace remaining within the broom. The operator then takes hold of the brace by each end and slides it into the hook B.

Care should be taken to pass the needle through the broom on the open side of the hook, as the latter, being made to fit the brace, is necessarily smaller than the socketed end of the needle.

The brace is made about an inch shorter than the width of the broom between the lines of sewing, so that when the broom is pressed to its full width the ends of the brace will be covered by the straw.

The pressure of the brace facilitates the pressing, and conduces to the securing of a uniform thickness of broom.

The brace is preferably metallic, as hereinbefore stated, three-sixteenth-inch iron being found to answer well for the purpose; but obviously other material may be used.

Some of the advantages of the broom itself may be mentioned. It is far stiffer than an ordinary broom, and much more durable, the latter feature being due as well to the brace as to the fact that it obviates the necessity of tightly clamping the broom for sewing, which clamping inevitably results in a crushing and weakening, to a greater or less degree, of the straw.

The economical advantages, as regards the process of manufacture, consist in the greatly-increased facility of sewing.

As all the requisite stiffness is conferred by the brace, the broom need be but lightly clamped. It is obvious that the time and labor involved in passing the needle back and forth through the broom are lessened in a corresponding degree, and also that a great economy in point of material results. Experience has shown, moreover, that with the brace but two lines of stitching are necessary instead of three or more, as usual.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the handle, the hook B and transverse brace, substantially as described.

2. The method herein described of manufacturing brooms, consisting in attaching the straws to a handle adapted to receive a transverse brace, forming the broom into shape, inserting a brace through the broom from side to side by means of a socketed needle, and sewing, substantially as set forth.

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