(Model.)

C. O. ALLEN.

CARPET SWEEPER.

No. 258,343. Patented May 23, 1882.

Fig. 1.

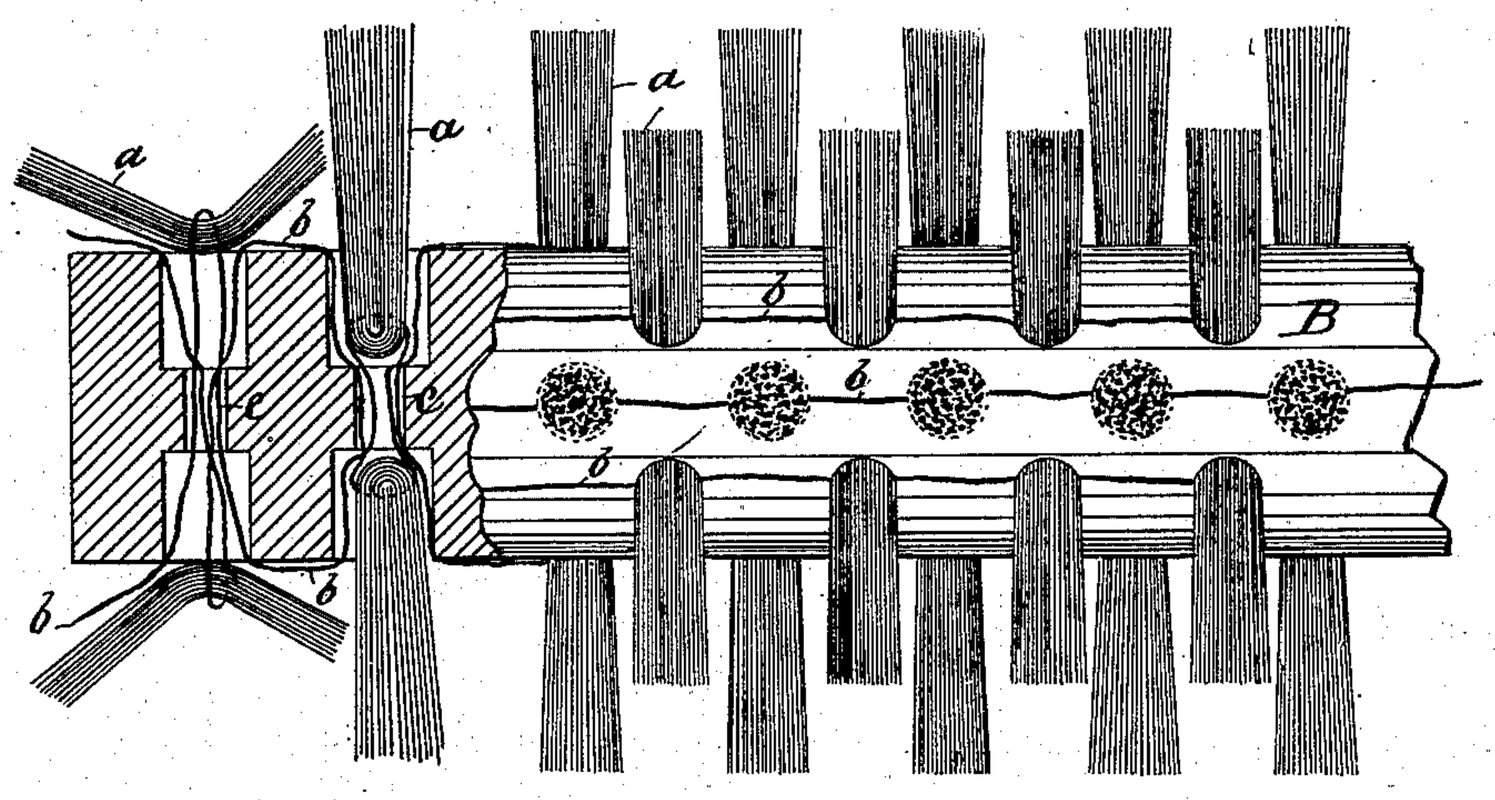
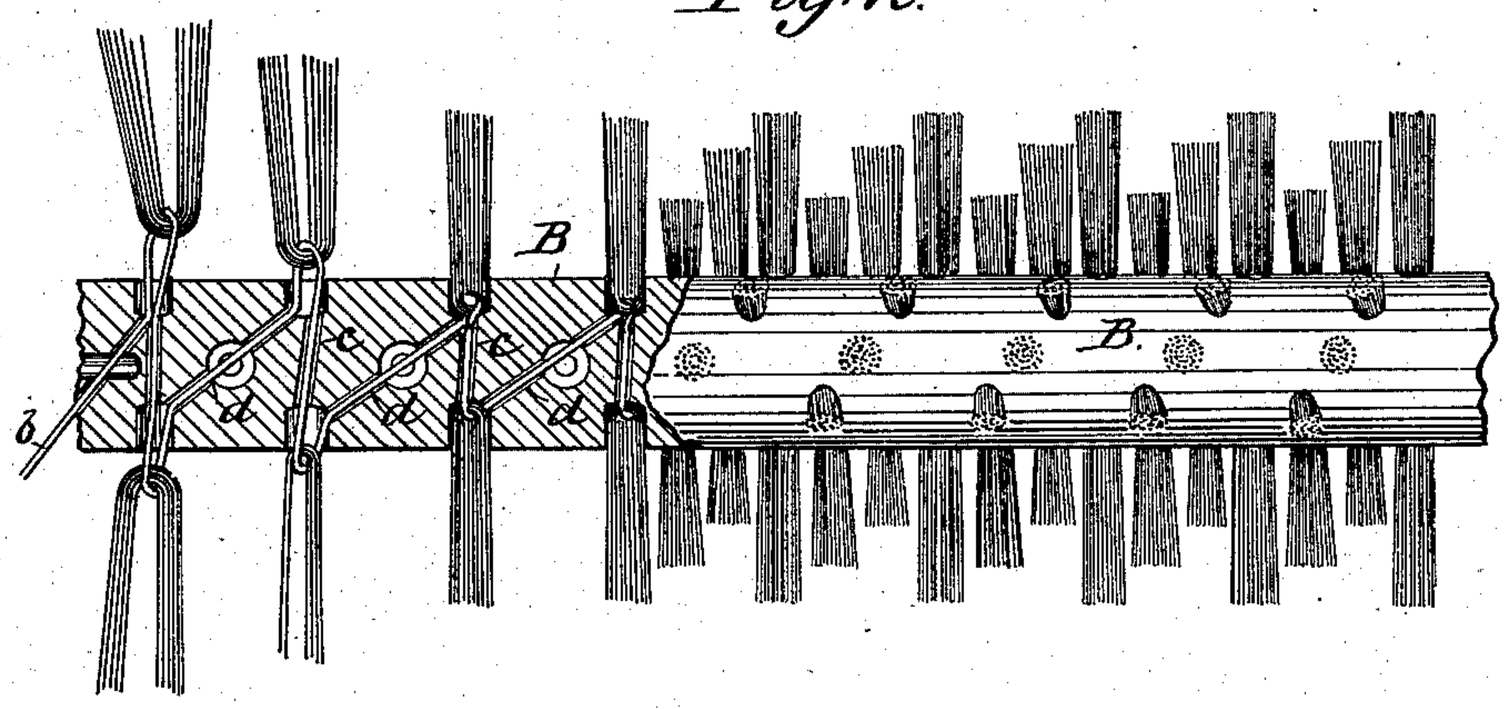


Fig. 2.



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CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 258,343, dated May 23, 1882.

Application filed April 7, 1881. (Model.)

To all whom it may concern:

Be it known that I, CHARLES O. ALLEN, of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and Improved Rotary Brush; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of the brush, partly in section. Fig. 2 is a similar view, showing a modified form of the same.

My invention relates to an improvement in rotary brushes, designed more particularly for carpet-sweepers, but applicable also for other uses.

It consists of a brush formed of a central core having sockets bored transversely therein from opposite sides, and connected by smaller holes, in combination with bristles and wires wrapped around the middle of the tufts of bristles and drawn into the socket, the said smaller communicating holes affording a passage-way for the wires and for drawing the bristles in.

It also consists in the peculiar manner of connecting the bristle-sockets by diagonal holes, whereby only one wire may be used, and that entirely concealed within the brush-core, as hereinafter more fully described.

In the drawings, B represents the central wooden core, which has bristle-sockets bored therein from opposite sides till the holes nearly meet, leaving a small hole, *c*, formed preferably by the worm of the bit when the holes are bored in a diametrical line, which hole connects the two opposite bristle-sockets to form a continuous hole through the core. Tufts of bristles *a* are then caught by looping two wires, *b b*, around their middle parts, and the bristles are then drawn into the sockets from the opposite sides, while the wires pass through the small hole *c* in the middle. The free ends of the wires are then laced through the next pair of sockets and communicating hole, and a second set of bristles are then drawn in by the same method.

As a modification of my brush, I may construct it as shown in Fig. 2, which has the advantage of requiring but one wire to fasten the bristles, and also of perfectly concealing the wire. Thus, instead of returning the wire through the small hole *c*, effecting communication between the diametrical sockets, I form a second set of diagonal holes, *d*, which run from a socket on one side of the core to that socket on the other side which is the next socket diametrically opposite. The same wire then is laced alternately through the diagonal holes *d* and the straight holes *c*, and is looped around the bristles on each side of the core, so as to dispense with the necessity of two wires.

Although more are shown in the drawings, I prefer to use four rows of bristle-sockets arranged in the form of spirals, and the wire is first secured at one end of the core and laced through two opposite sets of bristle-sockets, and is then returned through the other two sets of sockets that lie in a plane at right angles to the first, the wire being then fastened at the same end of the core where it was entered.

The construction of brush herein described saves a large amount of stock, holds the bristles very strongly, and it is cheaply and substantially made.

Having thus described my invention, what I claim as new is—

1. A rotary brush consisting of a central core having bristle-sockets bored therein transversely, with smaller holes or passage-ways connecting these sockets, in combination with the bristles and one or more wires laced through said holes and around the middle of the tufts of bristles, as described.

2. A rotary brush consisting of a central core having bristle-sockets bored therein transversely with holes *c*, connecting diametrical sockets and diagonal holes *d*, in combination with the bristles and a single wire laced through said holes and around the bristles, substantially as shown and described.

CHARLES O. ALLEN.

Witnesses:
CHS. E. ALLEN,
EUGENE S. MATTESON.