W. DICKINSON.

BROOMS.

No. 181,524. Patented Aug. 29, 1876.

Fig. 1.

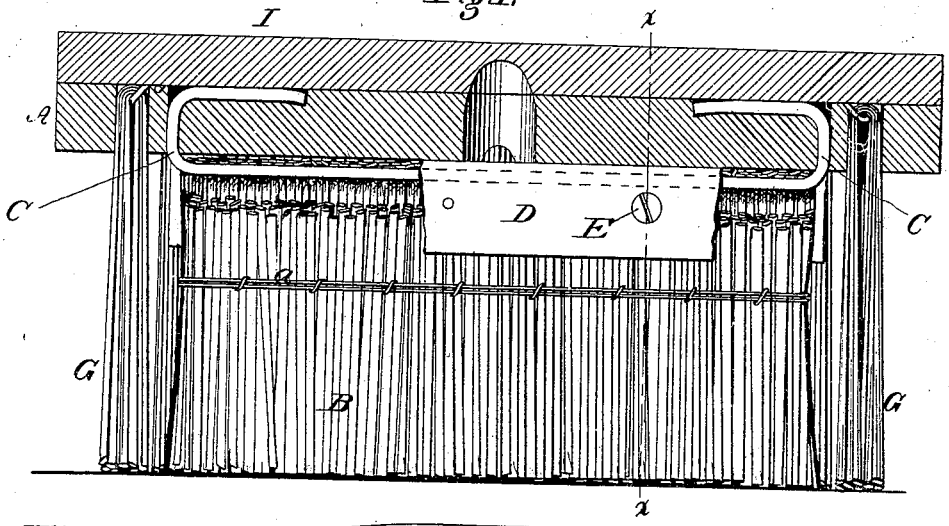


Fig. 2.

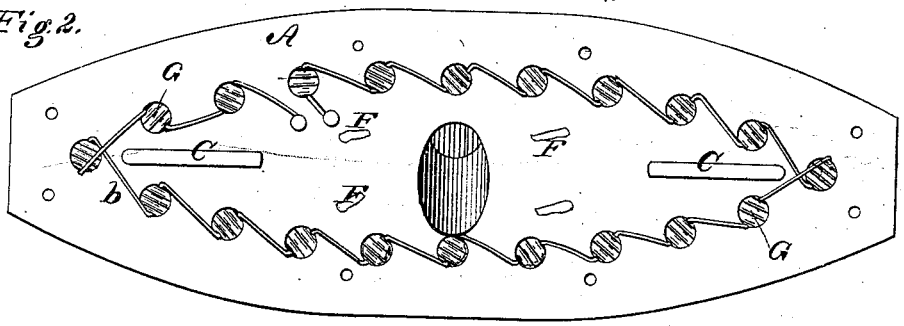
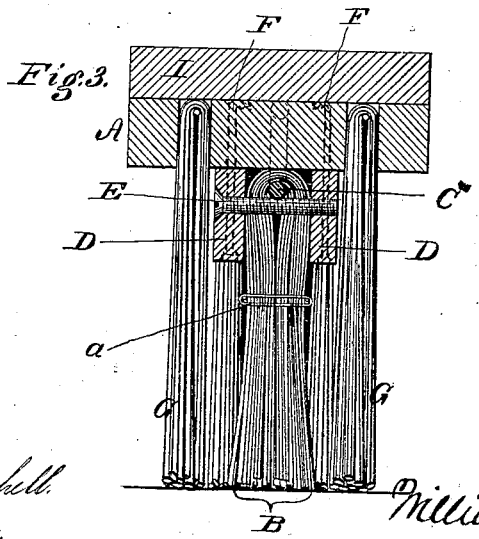


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAMS DICKINSON, OF WEST NORTHFIELD, MASSACHUSETTS.

IMPROVEMENT IN BROOMS.

Specification forming part of Letters Patent No. **181,524**, dated August 29, 1876; application filed June 15, 1876.

To all whom it may concern:

Be it known that I, WILLIAMS DICKINSON, of West Northfield, in the county of Franklin and State of Massachusetts, have invented certain Improvements in Brooms, of which the following is a specification:

My invention relates to that class of brooms which are made of rattan and palm-leaf, or either of them; and consists in the combination of a solid central mass of fine material to take up and retain the fine dirt and dust, with a surrounding mass of coarse material to receive the heavy wear and act upon the coarse dirt, and in a peculiar manner of arranging and uniting the parts, as hereinafter explained.

Figure 1 represents a longitudinal central section of my brush; Fig. 2, a top or back view of the same, with the cap removed; Fig. 3, a transverse section of the same on the line *x x*.

In constructing the brush I first provide a wooden head, A, of any desired form, and bore through the same, near the outer edge, a series of holes to receive the coarse material, and also two holes to receive the ends of the wire, by which the fine material is secured in place. I next provide a mass of fine material, B, preferably palm-leaf split into fine strips, and fold or double the same over a strong wire, C, and then bend the ends of the wire upward, and insert them through the two holes in the head A, and double them down on top thereof, as shown in the drawings. Two wooden strips or clamps, D, are next placed against opposite sides of the fine material B, and united and drawn tightly against the same by heavy screws E passed through the material and the clamps, as shown. The clamps are then secured to the head A by clinch-nails F driven upward through them, as shown, or by screws, the nails being preferred. After the clamps are thus secured in place, so as to compress and hold the material firmly and solidly between them, wire and twine, or either of them, are wound around and stitched back and forth through the material, as shown at *a*, Figs. 1 and 3. The coarse material G—rattan or palm-leaf, as preferred—is then arranged in suitable bunches, which are doubled in the middle, drawn into the outside holes in the head, and secured by a wire, *b*, after which the brush is completed by applying the cap or back I.

By combining in one brush the outside coarse material G and the central fine material B, the broom is rendered very efficient in its action, and at the same time very durable, the coarse strong material receiving the heavy wear and strain, and loosening and carrying before it the heavy coarse dirt, while the fine material which is unfitted to receive the heavy wear, takes up the fine dirt and dust passed over by the coarse material. By folding the fine material over the wire and clamping it between the wooden bars in the manner shown, it is held firmly and securely and in a close compact mass, and prevented from being bent or broken down by use.

Having thus described my invention, what I claim is—

The herein-described broom, consisting of the head A, provided with the coarse fibrous material G seated in its outer edge, and the compact central mass of fine fibrous material B doubled over the wire *c* and clamped between the blocks D, the wire and the blocks being secured to the head, and the blocks united by the screws E, as shown.

WILLIAMS DICKINSON.

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