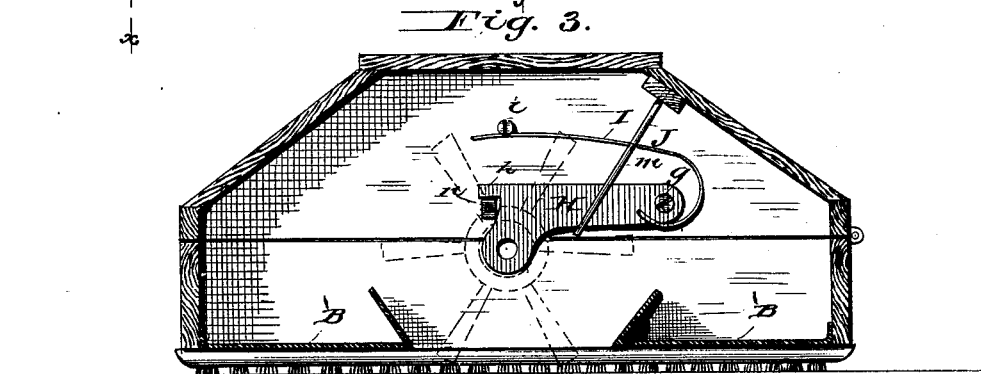
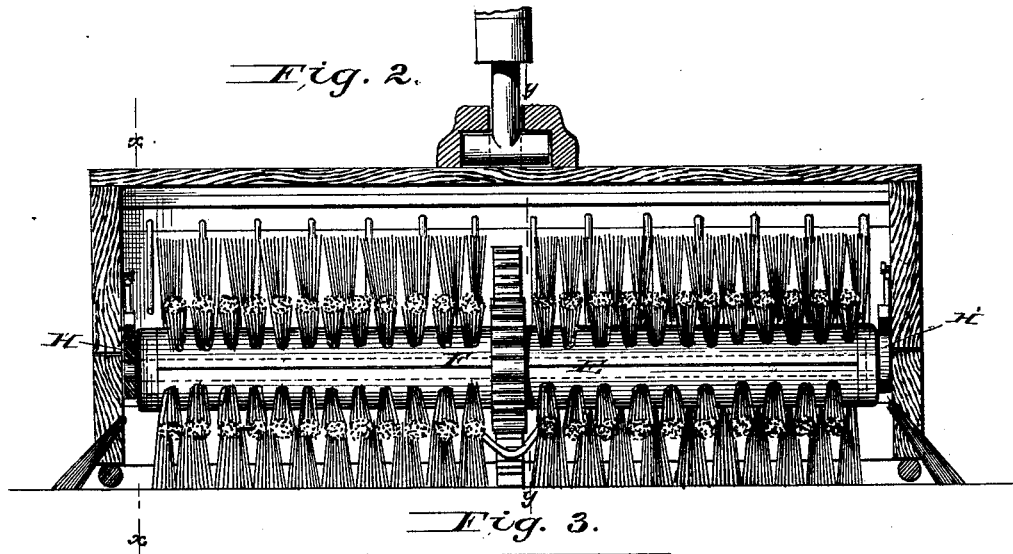
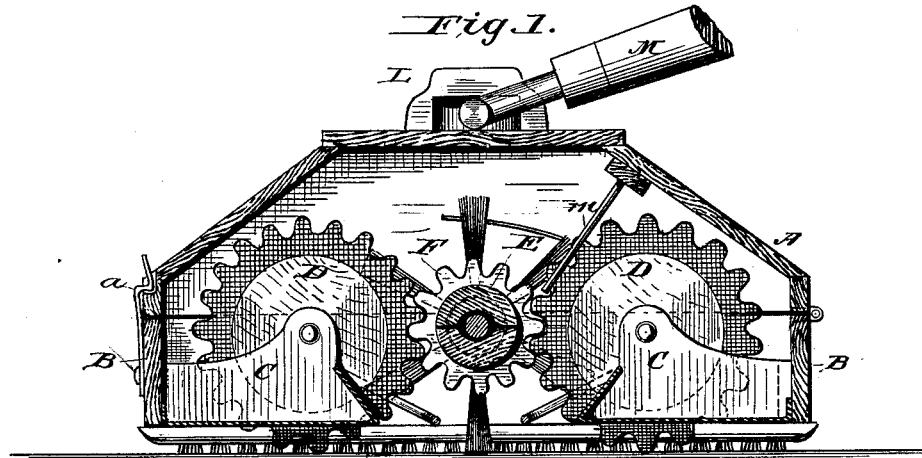


E. B. CLARKE.
Carpet-Sweeper.

No. 219,848.

Patented Sept. 23, 1879.



Attest:
H. L. Perrine
Am. Long

Erwin B. Clarke
Inventor.

By *N. H. A. J. J.*
Atty.

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Fig. 4.

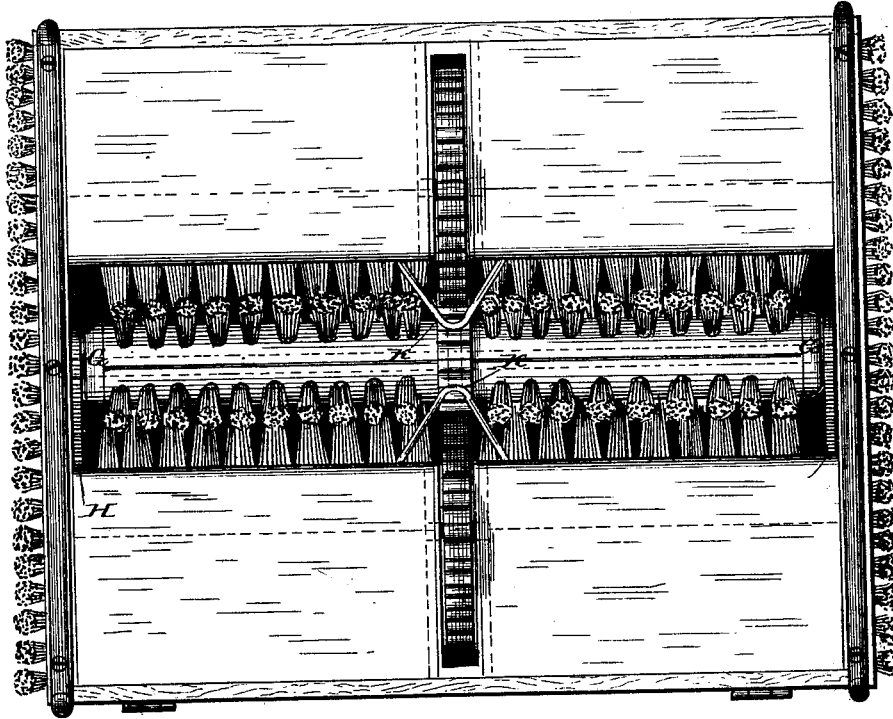


Fig. 5.

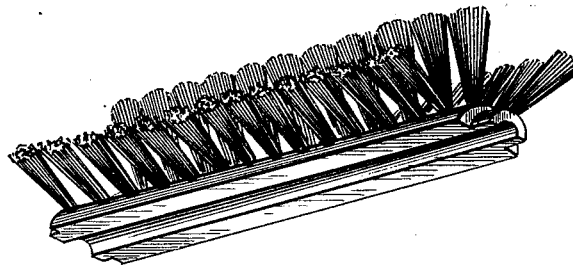
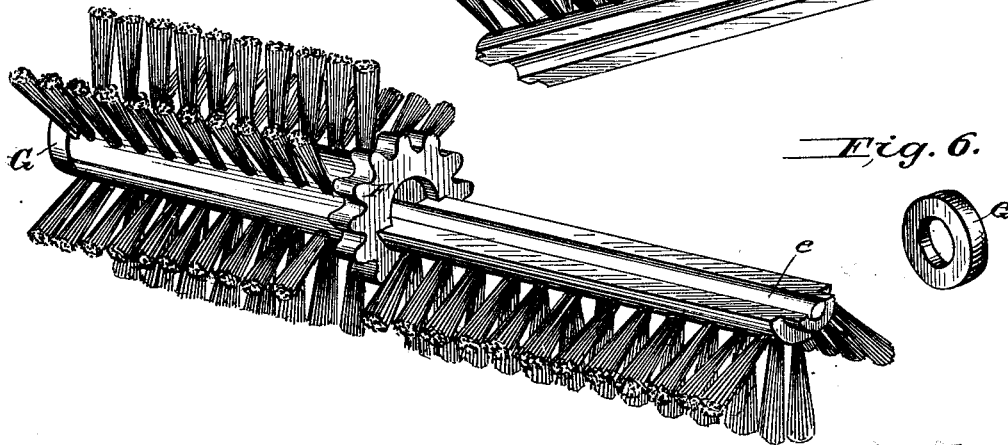


Fig. 6.



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UNITED STATES PATENT OFFICE.

ERWIN B. CLARKE, OF GRAND RAPIDS, MICHIGAN.

IMPROVEMENT IN CARPET-SWEEPERS.

Specification forming part of Letters Patent No. **219,848**, dated September 23, 1879; application filed February 27, 1879.

To all whom it may concern:

Be it known that I, ERWIN B. CLARKE, of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Carpet-Sweepers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a cross-section through *yy* of Fig. 2; Fig. 2, a longitudinal section along the length of brush; Fig. 3, a cross-section through *xx* of Fig. 2, showing one of the self-adjusting bearings; Fig. 4, a bottom view of the sweeper; Fig. 5, a detached perspective view of brush, with one section thereof separated; and Fig. 6, a perspective of cap removed from end of the brush-shaft.

My invention relates to carpet-sweepers; and it consists in the construction and combination of parts hereinafter specified.

In the accompanying drawings, the letter *A* indicates the casing or shell of the sweeper, which has sides, *B*, one of which is hinged, and the other secured by a spring, *a*, as shown in Fig. 1, although both sides may be hinged.

The object, however, of securing one side by the spring is to render easy the separation of the drive-wheels and the pinion on the brush-shaft. To these sides there are secured dust-pans *B'* by means of flanges on the same, through which and the sides may be driven screws or brads. Instead thereof they may be secured thereto by means of bolts passed through the sides and through hangers *C*, these hangers being between the ends of the dust-pans, and the latter being soldered or otherwise secured thereto at the junction of the two. These hangers have two sides, and between the sides of each hanger there is journaled a driving-wheel, *D*, which has a core or center of wood, metal, or like material, and a face of india-rubber or equivalent noiseless material, the face being toothed in order that the wheel may gear with a pinion on the brush-shaft.

The brush-shaft *E* is constructed in two cross-sections and two or more longitudinal

sections, both ends of each cross-section being shouldered. The object in making the shaft in section is to admit of the bristles being secured therein by means of wire, strings, or equivalent means, instead of by cement. The bristles are inserted in openings cut in the shaft for their insertion, and securely held therein and the one to the other by means of wires run around each and continued from one to the other. The longitudinal sections are brought properly together, and the shoulder on the inner ends of the two cross-sections inserted into an opening in the pinion *F*, and a rod, *e*, may be run through a hole extending through the length of the shaft, so as to strengthen the same.

The pinion holds the inner ends of the shaft together, and caps *G* placed over the shoulders at the outer ends of the shaft hold the sections together at those points. The brush thus constructed can be compactly packed for transportation, and any part can be easily replaced by another when rendered necessary from any cause. This brush extends from side to side of the casing, within the same, and is suspended or journaled in brackets *H*, pivoted to the sides of the casing by a screw or pin, *g*, passed through the two. The other end of the bracket is curved downward, as shown in the drawings, in which lower portion is a hole, in which rests a stud on the outside of the cap *G*, thereby suspending the brush. The bracket is also provided with a lug, *h*, which is to engage with a stud, *n*, on the inside of the casing *A*, the object being to prevent the bracket from falling below the stud, while it is left free to rise above the same. This leveraged bracket is held down by a spring, *I*, which, in this instance, is a wire or piece of steel or other suitable material, curved as shown, so as to fit into a slit made in the bracket, the other end bearing against a pin, *i*, on the side of the casing. By this construction the brush can give to any obstructions met with in working the sweeper.

A comb, *J*, consisting of a bar secured to the inside of the sweeper, has prongs or teeth *m* extending therefrom at such an angle that the bristles of the brush when revolved will come in contact therewith and be cleaned by them.

Wires *K*, or their equivalents, are soldered

or otherwise secured to the flange of each of the dust-pans B', and project therefrom toward the brush, extending on both sides of the driving-wheels and converging toward the bristles, the object of these being to draw toward each other the bristles next to the driving-wheels, so that all portions of the carpet within the casing will be swept. As soon as the bristles pass the center of the sweeper they leave the wires and assume their normal position, and are free from interfering with the running-gear.

In order that the sweeper may sweep close to the wash-boarding, bristles are made to project from the sides of the casing, as clearly indicated in Fig. 2, also in Fig. 4.

The top of the casing is provided with a socket, L, which is hollow and has a slot in the top, through which the T end of the handle M is inserted and turned, whereby it is held securely in place, and yet susceptible of easy detachment from the casing.

Having thus fully described my invention, what I claim is—

1. A carpet-sweeper consisting of a casing, A, a brush, E, within the same, dust-pans B', for receiving and holding the dust or dirt, and brushes projecting laterally from the ends of the casing, as and for the purposes set forth.

2. The brush E, made in sections, as described, and combined with caps G and pinion F, substantially as set forth.

3. The combination of the wheels D, brush E, pinion F, and wires K, substantially as set forth.

4. The combination of casing A, brush E, pinion F, wheels D, hangers C, wires K, comb J, and pans B', substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ERWIN B. CLARKE.

Witnesses:

W. A. SHINKMAN,

DANIEL SULLIVAN.