

S. H. MERRITT.
Carpet-Beaters.

No. 154,703.

Patented Sept. 1, 1874.

Fig. 1.

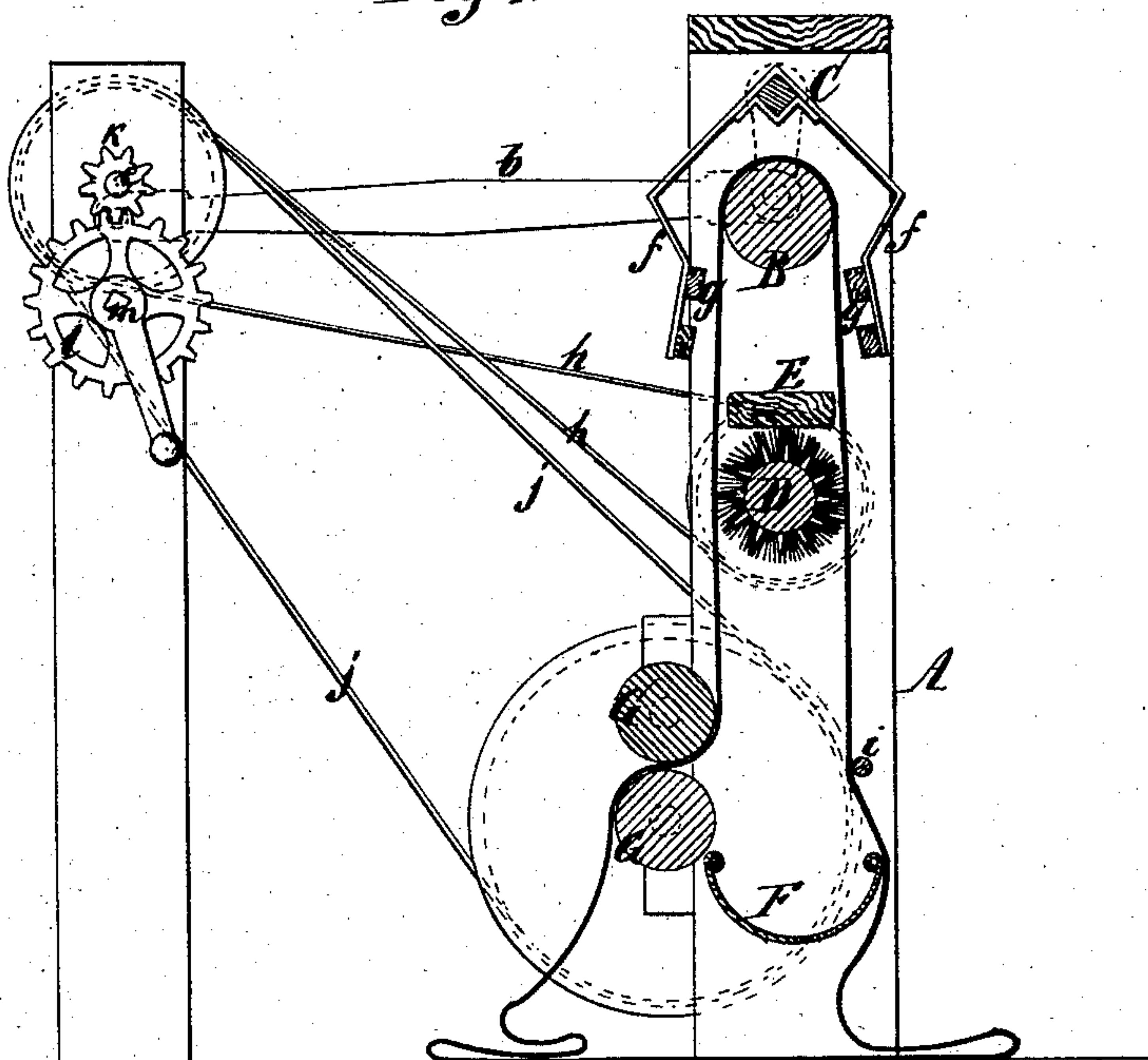
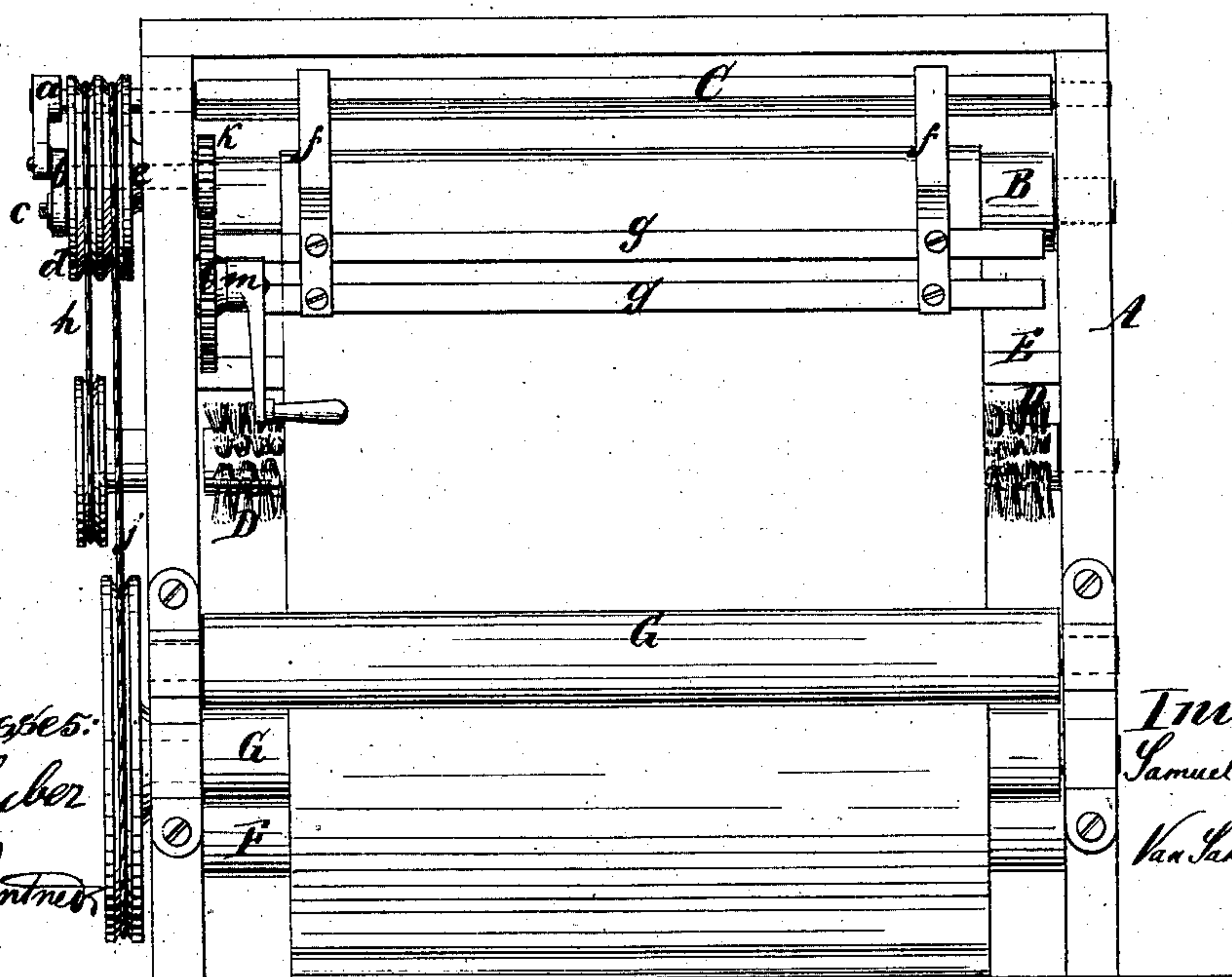


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

SAMUEL H. MERRITT, OF MOTT HAVEN, NEW YORK.

IMPROVEMENT IN CARPET-BEATERS.

Specification forming part of Letters Patent No. 154,703, dated September 1, 1874; application filed June 10, 1874.

To all whom it may concern:

Be it known that I, SAMUEL H. MERRITT, of Mott Haven, in the county of Westchester and State of New York, have invented a certain new and Improved Carpet-Beater, of which the following is a specification:

This invention is illustrated in the accompanying drawing, in which—

Figure 1 represents a transverse vertical section. Fig. 2 is a front view of the same.

Similar letters indicate corresponding parts.

This invention consists of a guard-rail interposed between a carpet-supporting roller and a revolving brush, said parts being combined with a beater composed of slats, which are attached to arms extending from an oscillating shaft, and made to straddle the roller over which passes the carpet, the arrangement being such that the brush acts on the inner surfaces of both strands of the carpet depending from the supporting-roller, while the beaters strike the depending strands of the carpet alternately from opposite sides, and hold the same in contact with the brush, the guard-rail preventing a sagging between the brush and the carpet-supporting roller, which prevents the carpet bearing too heavily upon the brush under the action of the beaters.

The carpet is united at its ends, so that it forms an endless apron, which is drawn forward by suitable feed-rollers, and its motion is continued until it has been freed from dust.

In the drawing, the letter A designates a frame, which forms the bearings for the supporting-roller B, from which the carpet is suspended. Over this supporting-roller and parallel to the same is a shaft, C, to which a rocking motion is imparted by a crank, *a*, which connects by a rod, *b*, with an eccentric wrist-pin, *c*, secured in the face of a disk, *d*, which is mounted on a shaft, *e*. From the rock-shaft C extend two or more pairs of arms, *f*, which straddle the supporting-roller B, and to which are secured the slats *g*, so that, when the rock-shaft oscillates, the slats *g* strike alternately the strands of the carpet depending from the supporting-roller. Beneath this roller is a revolving brush, D, which is situated between the two strands of the carpet, and the diameter of which is such that it acts simultaneously against the inner surfaces of said strands, thus removing the

dust which becomes disengaged by the blows of the beating-slats *g* against the outer surfaces of the strands of the carpet. Above the brush is situated a guard-rail, E, which prevents the carpet from bearing too hard against the brush under the action of the beaters, and said brush receives a revolving motion by a belt, *h*, which extends from a pulley mounted on the shaft *e*.

It will be seen that by the action of the beaters the carpet is thrown in contact with the brush, as far as the guard-rail will permit, and thereby the action of the brush is increased.

The dust, which is disengaged by the brush D, collects in a trough or receptacle, F, situated in the lower part of the frame A, and with this trough may be combined a suction-blower, so as to remove the dust and carry the same out in the open atmosphere, or in a suitable outbuilding or chamber.

The carpet is first placed on the supporting-roller B; then one of its ends is drawn through between the feed-rollers G G, while its other end is carried through under a guide-bar, *i*, and under the dust-receptacle F, and finally both ends are connected, so that the carpet forms an endless apron. By imparting motion to the feed-rollers G, this endless apron is carried along over the supporting-roller, and this motion is continued until, by the action of the beater and of the brush, the carpet is freed from dust.

The feed-rollers G receive their motion by means of a belt, *j*, from a pulley mounted on the shaft *e*, and this shaft is geared together by a pinion and cog-wheel, *l*, with the driving-shaft *m*.

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

The roller B, revolving brush D, and guard-rail E, the latter interposed between the brush and roller, in combination with the rock-shaft C, and arms *f f*, having the slats *g g*, said arms straddling the roller B, and operating, in respect to the revolving brush, substantially as herein shown and described.

SAMUEL H. MERRITT.

Witnesses:

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