S.P. Rowell. Carnet Sweeper. Patented Oct. 5.1858.

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UNITED STATES PATENT OFFICE.

STEPHEN P. ROWELL, OF READING, MASSACHUSETTS.

CARPET-SWEEPER.

Specification of Letters Patent No. 21,701, dated October 5, 1858.

To all whom it may concern:

Be it known that I, Stephen P. Rowell, of Reading, in the county of Middlesex and State of Massachusetts, have invented an 5 Improved Machine for Sweeping Carpets; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, denotes a top view; Fig. 2, an underside view; Fig. 3, a rear elevation of said machine; Fig. 4, a transverse and central section of it; Fig. 5, a transverse section taken through its main gear; Fig. 6, is 15 a longitudinal section taken through its

brush.

In the drawings, A, represents the case of the sweeper, it being open at bottom, and carrying a cylindrical brush B, such brush 20 being applied so as to be capable of revolving within the case and on its axis and of working against an apron or spring plate C, arranged in the case or the lower part thereof, as shown in the drawings.

25 When the sweeper is in use, its case is supported on the floor by means of two may be thrown forward by the upper part wheels, D, E, one of which viz, D, is a gear wheel and engages with a pinion f, fixed on the brush axle. The rotary motion of the 30 said gear caused by friction against the carpet and by moving the machine along over the carpet puts the brush in revolution toward the inner edge of the apron or spring plate before mentioned and brushes the dust 35 from the carpet and upon the said apron.

A carpet sweeper constructed with a rotary brush to operate or be operated as described is not new, but I have applied to it certain improvements. In the first place, 40 as the brush of such a carpet sweeper has been unprovided with any means by which it could be raised or lowered with respect to the spring plate or apron in order that proper adjustment of the brush to the apron 45 according to the wear of the brush or other circumstances; and at the same time, proper engagement of the gearing for operating the brush. I have furnished the carpet sweeper with such appliances as will be hereinafter 50 described. Furthermore, I have so applied its rear pan or dust receptacle to the frame or case as to enable such pan or receptacle to be turned outward and upward with the side of the case for the purpose of readily 55 discharging any dust or matters which may

have accumulated within the said receptacle.

In carrying out my invention I support each journal, a, within a curved rack, b, applied to slide within a curved groove, c, arranged within one end of the frame or case 60 and concentrically with the axis of the supporting wheels. Furthermore, I apply to each rack and within its end of the case, a worm or screw d, in such manner that by rotating such screw on its axis it shall cause 65 the curved rack to move longitudinally in its supporting groove and at the same time maintain the axis of the brush at a proper distance from the axis of the supporting wheels to secure the engagement of 70 the main gear wheel and its pinion. Furthermore, I apply to the rear part of the frame, or case, a hinged flap or door g, or attach such rear part, g, to the rest of the case by hinges, h, h, so as to enable it to be 75 turned outward and upward into the position indicated in Fig. 4, at g, and I attach to the inner side of the said turning flap, a dust trough or receiver i, arranged with respect to the brush as shown in the draw- 80 ings, the same being to catch any dust which of the brush. By means of such appliances, it will be readily seen that any little wear of the brush will not require such brush to be 85 discarded and another substituted, for in this improved carpet sweeper, as the brush becomes worn, it may be adjusted or let down toward the apron, the connection of its pinion and main gear being always pre- 90 served.

I claim,

1. In combination with the brush and its main operating gear, devices substantially as described for adjusting the brush and 95 maintaining its axis at the same or at its proper distance from the axis of the gear in order to maintain the gear in engagement with its pinion as specified.

2. I also claim the application of the rear 100 dust receptacle to the frame so as to be capable of being swung or turned upward and outward therefrom substantially in manner and for the discharge of dust as specified.

In testimony whereof, I have hereunto set my signature.

STEPHEN P. ROWELL.

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Witnesses: CHARLES W. YOUNG,

RICHMOND HESELTON.