N. V. STEELE. CARPET CLEANER. APPLICATION FILED NOV. 12, 1903

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CARPET-CLEANER.

SPECIFICATION forming part of Letters Patent No. 771,333, dated October 4, 1904.

Application filed November 12, 1903. Serial No. 180,878. (No model.)

To all whom it may concern:

Beitknown that I, NORA VELNETTA STEELE, a citizen of the United States, residing at Missouri Valley, in the county of Harrison and 5 State of Iowa, have invented a new and useful Carpet-Cleaner, of which the following is a specification.

The invention relates to improvements in

carpet-cleaners.

The object of the present invention is to improve the construction of carpet-cleaners and to provide a simple and comparatively inexpensive one capable of enabling the dust and dirt to be rapidly removed from a carpet 15 without injuring the same.

A further object of the invention is to provide a carpet-cleaner of this character adapted to be readily operated and capable of rapidly beating a carpet and of sweeping the dust

20 and dirt therefrom.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the 25 accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be re-3° sorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a carpet-cleaner constructed in ac-35 cordance with this invention. Fig. 2 is a vertical sectional view of the same, taken transversely of the shaft which carries the beaters and brushes.

Like numerals of reference designate corre-4° sponding parts in both figures of the drawings.

1 designates a base, preferably constructed of wood and provided with suitable casters 2 for enabling it to be readily moved from one position to another, and the said base, which 45 is preferably oblong, as shown, is provided at opposite sides with adjustable supports 3 for holding the carpet in position to be operated on by the machine. The supports consist of upper horizontal round bars 4, designed to be 5° constructed of any suitable material and pro-

vided with depending tubular sections 5, which receive uprights rods 6, located beyond and suitably connected with the base. The rods and the tubular sections or members 5 form telescopic posts for the bars 4 and permit the 55 bars to be raised and lowered, as will be readily apparent. The tubular sections or members 5 are provided with set-screws 7 for engaging the lower sections or rods 6, whereby the horizontal carpet-receiving bars are secured at 60 the desired adjustment. The lower sections or rods are adjustably connected with the base by arms 8, which are arranged in suitable bores or openings and which are slidable inward and outward to arrange the posts different dis- 65 tances apart. Any suitable means may be employed for securing the arms 8 in their adjustment, if desired. The posts may, as shown in Fig. 2, be inclined to arrange them the desired distance from the sides of the base for 70 supporting the carpet in proper position to be engaged by beaters 9 and brushes 10.

The carpet 11 is arranged substantially as illustrated in Fig. 2 of the drawings, and it extends across the machine, being supported 75 by the horizontal rods or bars 4 and being looped between the same, as shown, and the said rods or bars are provided at their opposite sides with projecting fingers or spurs adapted to engage the carpet, whereby the 80 same is prevented from accidentally slipping on the supports when acted upon by the beaters and brushes. These projections or spurs are adapted to hold the carpet against accidental movement in either direction, and af- 85 ter a carpet has been moved across the machine in one direction it may be moved back again should it be necessary or desirable to again subject the carpet to the action of the

machine.

The beaters consist of rods or stems 13, transverse bars 14, arranged at the outer ends of the rods or stems, and a series of flexible striking devices, consisting, preferably, of chains 15, secured at their inner ends to the bars or 95 heads 14 and provided at their outer ends with balls 16. The stem 13 is adjustably connected to a horizontal shaft 17 by a clamp 18, provided with inner and outer cuffs or sleeves 19 and 20. The outer cuff or sleeve receives 100

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the stem of the beater, and the inner stem or sleeve is arranged on the shaft. The clamp is provided with set-screws or other suitable fastening means for fixing it to the shaft and 5 for holding the beater at the desired adjustment. By this construction the beater may be arranged at the desired angle and in the desired position on the shaft, and its flexible carpet-engaging devices may be located the 10 desired distance from the shaft. Any number of beaters may be employed, and each beater may be provided with any desired number of flexible striking devices, which are arranged at intervals at the outer edge of the bar or 15 head 14. The bar or head and the stem or rod of the beater may be constructed of any desired material, as will be readily understood, and the flexible striking devices may be made of any flexible material and are preferably 20 provided with knobs or heads at their outer ends. When the shaft is rapidly rotated by the means hereinafter explained, the rotary striking devices of the beaters are caused to strike the carpet, and they may be arranged to 25 engage the same either beyond the supports upon which the carpet is mounted or the supports may be arranged a sufficient distance beyond the platform to cause the beaters to engage the carpet between the supports.

The brushes 10, which may be of any desired construction, are adjustable in the same manner as the beaters and are secured to the horizontal shaft by clamps 21 and are provided with stems or handles 22, adjustable in 35 the clamps and adapted to be moved inward and outward, so as to project the desired distance, whereby the brushes may be set in proper position for operating on a carpet. Any number of brushes may be employed, and 40 when the horizontal shaft is rotated the beaters will strike the carpet and thereby bring the dust to the surface, and the brushes will remove the dust and dirt from the surface of the carpet. Much of the dust and dirt will 45 be beaten from the carpet without the use of the brushes. The shaft is journaled in bearings 23 of standards 24, mounted upon the platform, at the ends thereof, and preferably

provided with legs 25, which are secured to 5° the upper face of the platform; but the standards may be constructed in any other desired

manner, as will be readily apparent. One end of the horizontal shaft is provided with a pinion 26, which meshes with a gear-55 wheel 27, and the latter is mounted upon a short shaft 28, located at one end of the machine and mounted in a suitable bearing 29 of the adjacent standard. The shaft is provided at its outer end with a crank-handle 30 or 60 other suitable means for enabling the machine to be operated. The machine may be easily operated by hand; but any other means may be employed for operating the machine. The combined width of the beaters is equal to the 65 width of the carpet, or rather the widest car-

pet operated on, so that every portion of the carpet will be subjected to the action of the beaters, and the latter are located at different points on the shaft and successively engage the carpet. The brushes or carpet-sweeping 70 devices are located at different points on the shaft and successively sweep the carpet after the same has been been operated on by the beaters.

Having thus fully described my invention, 75 what I claim as new, and desire to secure by

Letters Patent, is—

1. In a machine of the class described, the combination of a horizontal shaft, and carpetcleaning devices provided with stems and hav- 80 ing clamps adjustably receiving the stems and the shaft, whereby the carpet-cleaning devices are adapted to be set at different points on the shaft and caused to project different distances from the same, substantially as described.

2. In a machine of the class described, the combination with carpet-cleaning devices, of opposite carpet-supports adapted to hold a carpet in position to be operated on by the said devices, said supports being adjustable both 90 upward and downward and horizontally, sub-

stantially as described.

3. In a machine of the class described, the combination with carpet-cleaning devices, of opposite adjustable supports composed of hori-95 zontal bars provided at intervals with means for engaging a carpet, and extensible sectional posts provided with adjusting means and adapted to support the horizontal bars at different elevations, substantially as described. 100

4. In a machine of the class described, the combination of a horizontal shaft, carpet-beaters composed of a stem, and a head provided with striking devices, brushes provided with stems, the stems of the brushes and the carpet- 105 beater being arranged transversely of the shaft, and means for adjustably connecting the stems to the shaft, whereby the stems are capable of adjustment longitudinally of the shaft and across the same to arrange the carpet-beat-110 ers and the brushes at the desired points and to cause them to project from the shaft the desired distance, substantially as described.

5. In a machine of the class described, the combination with carpet-cleaning devices, of 115 opposite carpet-supports arranged to loop a carpet beneath the said devices, said supports being capable of vertical adjustment, whereby the carpet may be held in proper position with relation to the carpet-cleaning devices, sub- 120

stantially as described.

6. In a machine of the class described, the combination with carpet-cleaning devices, and a base, of opposite adjustable supports composed of horizontal bars provided with means 125 for cleaning a carpet, and extensible sectional posts provided with adjusting means, said posts being also provided at their lower ends with horizontal portions adjustably secured to the base, substantially as described.

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7. In a machine of the class described, the combination of a portable platform, standards arranged at the ends of the platform and provided with legs secured to the same, a shaft journaled on the standards, carpet-cleaning devices carried by the shaft, gearing for rotating the shaft, and opposite carpet-supports located at the sides of the platform and carried by the same and adjustable upward and

downward and inward and outward, substan- 10 tially as described.

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

NORA VELNETTA STEELE.

Witnesses:

W. J. Burke, Lucile Shelley.