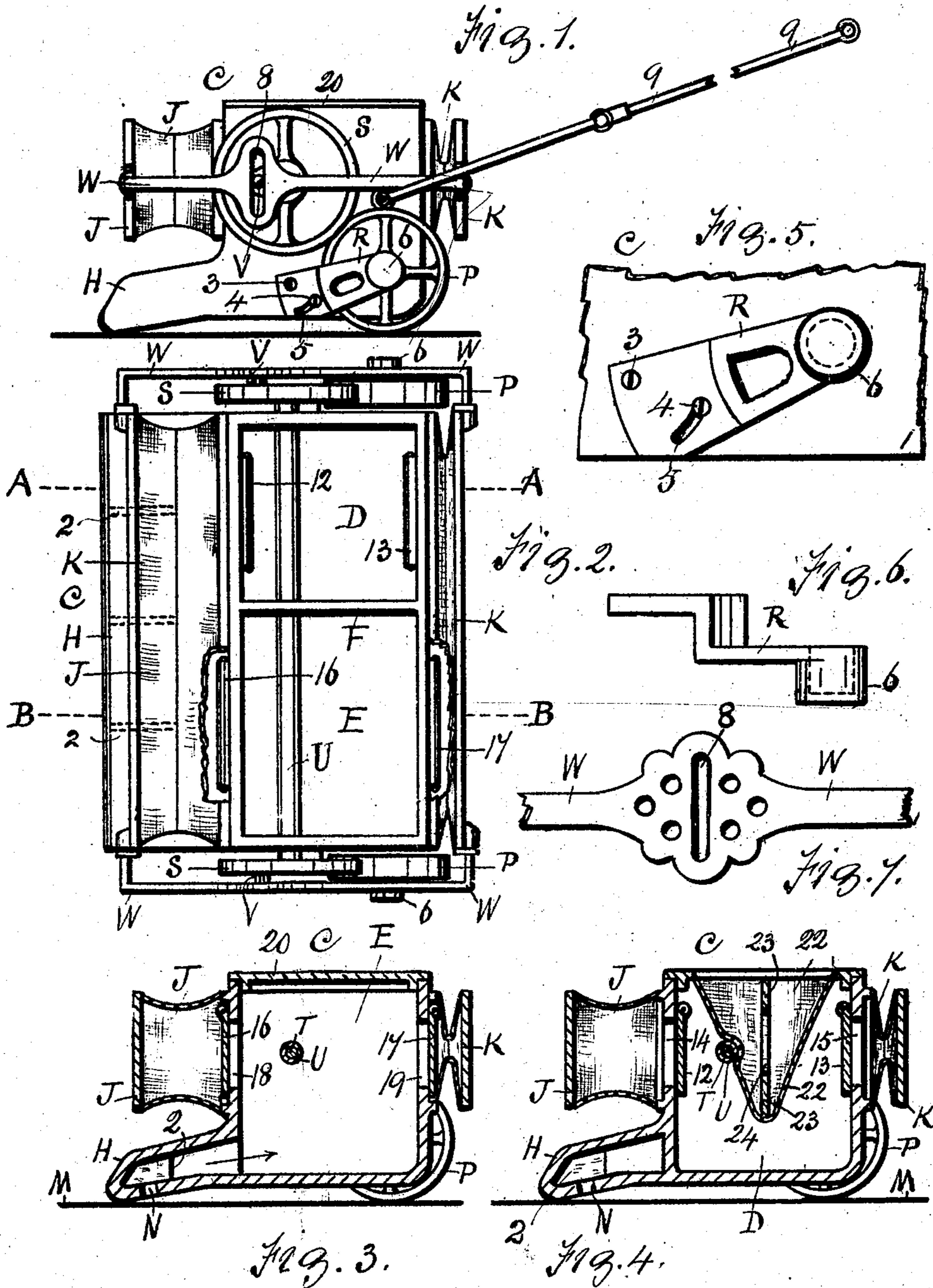


J. DUDLEY.
CARPET CLEANING MACHINE.
APPLICATION FILED APR. 29, 1908.

924,542.

Patented June 8, 1909.



Witnesses.
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UNITED STATES PATENT OFFICE.

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CARPET-CLEANING MACHINE.

No. 924,542.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed April 29, 1908. Serial No. 430,014.

To all whom it may concern:

Be it known that I, JOB DUDLEY, a subject of the King of Great Britain, and residing at Hamilton, in the county of Wentworth, in the Province of Ontario, Canada, have invented new and useful Improvements in Carpet-Cleaning Machines, of which the following is a specification.

My invention relates to improvements in carpet cleaners, in which a machine, or carriage, on two rotary floor wheels, is adapted to be pushed to, and fro, on a carpet, or floor, said machine having a forward and lower mouth in proximity to the floor, and provided with front and rear bellows, adapted to reciprocal movement, and co-acting together, to draw dust and air through said mouth and lodge the dust in one receptacle, or chamber, and means in the adjoining chamber to receive air and assist the operation of the machine.

The objects of my invention are, first to remove all dust from carpets and floors, second, to provide means whereby the dust can be easily removed from the machine, third, to provide means whereby folds, creases, fibers of carpet or any unevenness of carpet, are prevented from entering the mouth of the machine. I attain these objects by the mechanism illustrated in the accompanying drawing in which:—

Figure 1 is a side elevation of the machine, showing the front bellows extended and the rear bellows closed. Fig. 2 is a plan of the same, the two upper covers being removed, and parts of the front and the rear bellows being broken away to show the air and dust valves, in the forward and rear sides of the outer part of the dust box. Fig. 3 is a sectional elevation of the machine through the broken line B, B, of Fig. 2 of the drawing. Fig. 4 is a sectional elevation of the machine through the broken line A, A, of Fig. 2 of the drawing. Fig. 5 is an enlarged side elevation of the adjustable bearings of the floor wheels, both sides of the machine being similar. Fig. 6 is a plan of Fig. 5, of the drawing. Fig. 7 is an enlarged side elevation of the side strap, or connecting rod.

Similar characters refer to similar parts throughout the several views.

In the drawing, the machine or portable carriage, is indicated by C, and comprises a box having a dust receptacle E and an air chamber D, separated by a partition wall F.

H, is the lower forward nose part of the machine C, and extends beyond the forward and extended bellows J, and transversely to the breadth of the machine. The opposite or rear part of the machine has a similar bellows K, shown closed, or contracted. The said forward extension H, is shown resting on a floor, or carpet M, and has a mouth, or transverse elongated slot, or opening N, which communicates with the dust receptacle E, through the lower part of said receptacle, as indicated by arrow in Fig. 3 of the drawing. In the forward nose part H, are three, more or less divisional walls 2, of light material. The walls 2, prevent any elongated material, such as fiber, or other matter, from entering the mouth N, of the machine.

P, are side floor wheels, of suitable material, and are journaled in the adjustable bearings R, which are adjustably secured to the sides of the machine by means of screws 3, and 4. The bearings R, have slots 5, to allow the upper hub part 6 of the bearing to be raised, to bring the wheels P to close contact with the wheels S. The weight of the machine is borne by the floor wheels P, when operating. The upper and forward side wheels S are of suitable material and secured on the transverse shaft T, which is adapted to rotate, in either direction, in the stationary transverse tube, or sleeve U, which extends through the machine, and shown in Figs. 2, 3 and 4 of the drawing. The side wheels P, drive the side wheels S, by close contact, one with the other, or friction, the side bearings R, are adapted to bring the peripheries of the floor wheels to contact with the peripheries of the upper wheels.

V, are crank pins on the wheels S, and operate in the vertical slots 8, in the side straps, or connecting rods W, the ends of which are suitably secured to the outer ends of the bellows J, and K, to operate or reciprocate said bellows.

9, is a common two arm handle, suitably connected to the sides of the machine to operate the same, that is, to push the machine forward, and to pull the machine toward the operator, thereby rotating the drive wheels P, in either direction.

The side straps W, move horizontally together in reciprocal motion, thereby extending and contracting the bellows J, and K, alternately.

12 and 13, are opposite and similar valves on the inner sides of the forward and rear walls respectively, of the air chamber D, and cover the similar openings 14 and 15 in said walls. 16 and 17 are opposite and similar valves on the outer sides of the forward and rear walls respectively, of the dust receptacle E, and cover the similar openings 18 and 19 in said walls. The valves referred to are very light and sensitive and operate by the movement of the bellows, that is, by air propulsion and suction, for instance, when the bellows J, is extending, the valve 12 closes, and the valve 16 opens, and when the bellows J is closing, the valve 12 opens and the valve 16 closes. The opposite bellows K, together with the opposite valves 13 and 17 operate in like manner.

20 is a removable cover on the receptacle E, and 22 is a removable cover on the chamber D. The inwardly extended cover 22, on the chamber D, is of fabric material and extends a suitable distance in said chamber as shown in Fig. 4 of the drawing. The cover 22 affords air escapement through the same. The inwardly extended fabric cover, referred to, has an inner strengthening rib 23 which extends to the inner lower part of the same, said rib having an opening 24 for the hand to lift said inverted cover out of the chamber for cleaning and the like.

When the machine is in operation, the dust enters through the opening N, thence into the receptacle E, and finds lodgment therein. Air passes through the opening 18

and also through the opening 14 and into the air chamber D. The receptacle E, may be easily emptied of dust by removing the cover 20. More or less air passes through all the openings of the valves when operating.

What I claim as my invention and desire to secure by Letters Patent, is:—

1. In a carpet cleaning machine a divided box provided with an extension having a sectional mouth on its lower front part communicating with one division of the box, bellows on the front and rear of the box, a removable fabric cover inwardly extending in the box, adjustable floor wheels on the sides of the box and means connecting said wheels and bellows to operate the machine.

2. In a carpet cleaning machine a divided box provided with an extension having a sectional mouth on its lower front part communicating with one division of the box, bellows on the front and rear of the box, a removable fabric cover inwardly extending in the box, wheels adjustably connected to the box and adapted to rotate in either direction on the floor, wheels journaled on the box, said floor wheels adapted to rotate the journaled wheels and means connected to the journaled wheels and to the bellows, to operate the same.

JOB DUDLEY.

Witnesses:

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