(No Model.)

N. PYLES.

Carpet and Floor Dust-Receiver.

No. 226,788. **Patented April 20, 1880.**

Fig. 1.

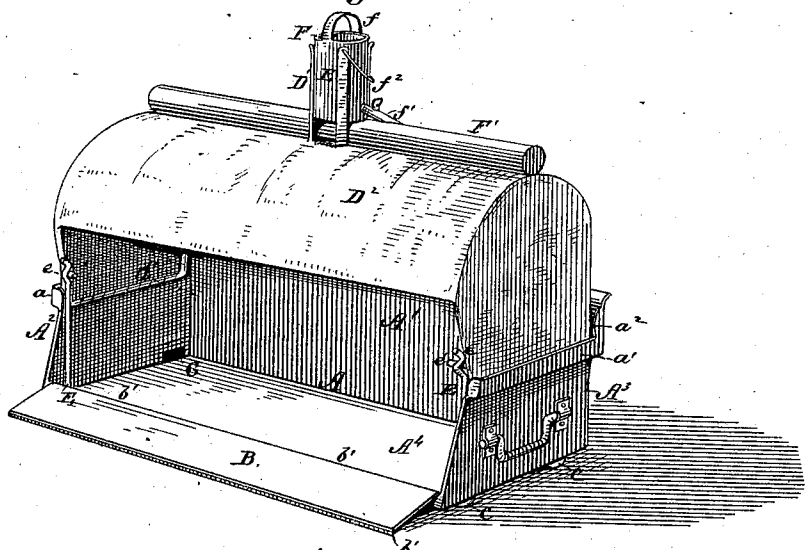


Fig. 2.

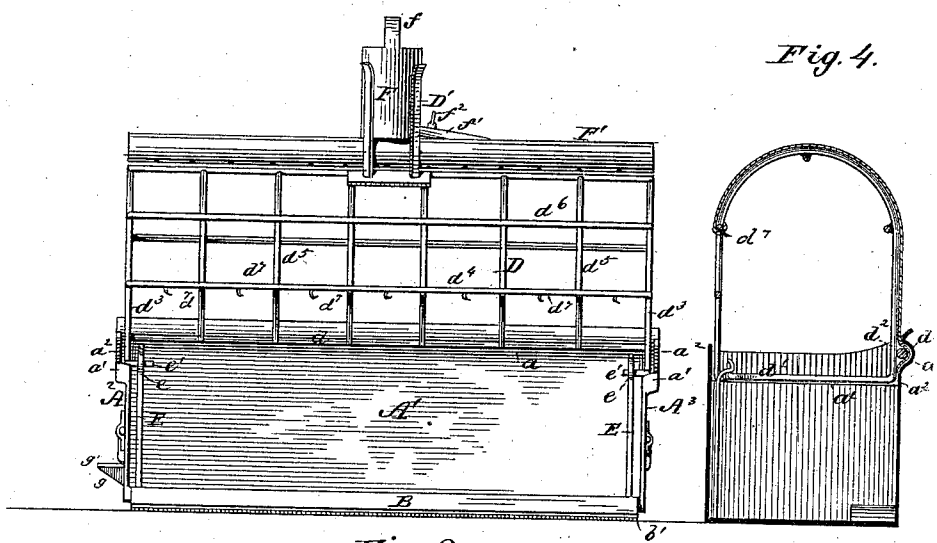
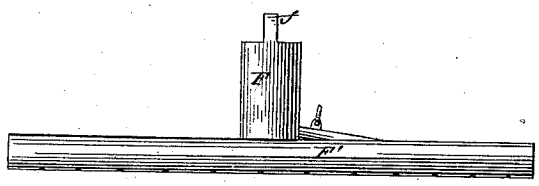


Fig. 4.

Fig. 3.



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UNITED STATES PATENT OFFICE.

NATHANIEL PYLES, OF WESTPORT, MISSOURI.

CARPET AND FLOOR DUST-RECEIVER.

SPECIFICATION forming part of Letters Patent No. 226,788, dated April 20, 1880.

Application filed March 10, 1880. (No model.)

To all whom it may concern:

Be it known that I, NATHANIEL PYLES, of Westport, in the county of Jackson and State of Missouri, have invented a new and Improved Carpet and Floor Dust-Receiver; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is to provide a dust pan or receiver that may be pushed along in front of the person sweeping by the broom as the carpet is being swept in the usual way, to receive all of the dust and dirt raised or swept up by the broom and carry it along until the entire floor has been swept.

My invention consists, primarily, in a rectangular fan or box open upon one of its sides, and mounted upon rollers in such manner that its open end may be arranged to face the sweeper and the corresponding edge of the bottom or floor plate of the pan rest upon the carpet, so that the dirt and dust may be swept immediately into the receptacle so formed and carried along from place to place.

My invention further consists in providing the above-described rolling dust pan or receiver with a hood or canopy that may be readily attached or detached from the dust-receiver to catch the dust that is raised by the broom and deflect it into the receiver.

My invention further consists in combining with the above-described rolling dust-receptacle and canopy a water-bucket and sprinkling-tube for dampening the cloth of the hood or canopy, and laying the dust that is driven beneath the canopy and depositing it in the receptacle.

My invention further and finally consists in forming the pan or receptacle of the above-described device with a depressed bottom to receive a quantity of dust and to hold whatever water may fall from the sprinkler, and a hinged leaf or floor-plate that will rest upon the carpet at its front edge and form an inclined plane for lifting the dirt over the front edge of the depressed bottom, and in providing a covered opening and spout at the rear corner of the pan to pour the accumulated dirt and water from the pan.

In the accompanying drawings, Figure 1 is a perspective view of the device; Fig. 2, a side elevation of the receptacle and canopy-frame with the cloth removed; Fig. 3, a side elevation of the water-bucket and sprinkling-tube detached; and Fig. 4 is a transverse section of Figs. 1 and 2.

The dust-pan receptacle A is a rectangular box, preferably of sheet metal, having an open side, which forms the front of the device. The remaining side, A′, forms the back, and the end pieces, A^2 A^3, joined thereto serve to inclose the receptacle.

The bottom A^4 of the box rests upon four rollers, *c*, (only two of which are shown,) that are let into the bottom plate a sufficient distance to permit the bottom of the receptacle to set close to the floor.

The front edge of the bottom piece is turned up to form a depression in the bottom of the receptacle, inclosed upon all sides, to completely hold the dust and dirt, and serves as convenient means for attaching hinges *b*, which connect one edge of a rectangular floor-plate, B, with it, so that the outer edge of the rectangular plate will be free to rest closely against the carpet.

The outer edge of the plate B may have a strip of rubber, *b′*, secured to its under side, so that it will slide smoothly over the carpet or floor and follow any irregularities of surface.

The floor-plate B thus forms an inclined plane, over which the dust is raised from the floor-surface over the front flange of the bottom plate into the receptacle.

When the sweeping is finished the floor-plate may be turned up to close in the front of the receptacle and permit it to be carried about without danger of spilling the contents.

The back A′ extends somewhat above the upper edges of the ends A^2 A^3, and is creased along its upper edge to form a depression, *a*, into which the framing of the canopy is secured, as hereinafter described. The upper ends of the end pieces, A^2 A^3, are similarly creased at *a′* *a′* for the same purpose, and are connected with the longitudinal crease *a* of the back by short creases a^2 a^2 at the ends of the back plate and at right angles to the crease *a*.

The canopy-frame D is preferably formed of stout wire, the base of which is formed of a

single piece, d, bent to conform to the creases a a' a^2 of the side walls of the receptacle A, so that the back section, d, will fit into the crease a, the sides d' into the creases a', and the short vertical sections d^2 into the creases a^2. The remaining portion of the base-piece of the canopy extends vertically at d^3 a suitable distance, and is then carried horizontally across the front of the frame from end to end.

Transverse pieces d^5 are bowed across from front to back, and are connected by longitudinal rods d^6 to complete the frame.

To the upper and middle portion of the canopy-frame is secured a wire or sheet-metal cage, D′, open at the top to receive a water-bucket, as hereinafter described, and provided with a bail or handle, by which the canopy-frame or the entire apparatus, when connected, may be carried from place to place.

The canopy or cover D^2 is made of light coarsely-woven material that will readily allow water to percolate through it for laying the dust, and is secured to the framing and receptacle by having the lower edges of its back and end portions tucked under the corresponding portions of the frame d and closely pressed thereby into the creases around the upper edges of the back and sides of the receptacle.

The frame D is held closely in place upon the receptacle to clamp the edges of the canopy, as described, by spring-rods E, that are secured to and project vertically from the bottom plate of the receptacle, and are provided at their free ends with hooks e e, that catch over pins e' e', secured to and projecting from the vertical front sections, d^3, of the canopy-frame.

The horizontal section d^4 of the canopy-frame is provided with hooks d^7, that catch into corresponding eyes in the front edge of the cover D^2 and securely hold it in place.

The canopy-cover D^2 is cut away at a suitable place to pass over the cage D′, and may be readily removed from the frame for cleansing it.

A water-bucket, F, fits snugly into the cage D′ at the top of the canopy-frame, and is provided with a bail or handle, f, by which it may be removed or carried.

A tube, F′, is secured to the bottom of the bucket to rest upon the top of the canopy and extend from end to end thereof, and is perforated at suitable points to sprinkle the canopy and interior of the receptacle.

A smaller pipe, f', connects the bucket with the tube, and the water admitted thereto is regulated by a cock, f^2, so that a limited quantity only is allowed to pass into the sprinkling-tube.

The edges of the sides and back of the pan are carried up a suitable distance and bent over to catch any water that may run down the sides of the canopy-cover and prevent it from running onto the floor.

In order that the receptacle or pan A may be readily emptied of its contents of dust and water, an opening, G, provided with a spout, g, and trap valve or cover g', is arranged at one end of the device, very near to the back corner of the pan A, and a suitable distance from the bottom thereof, so that the pan may be tilted and the contents allowed to escape through the opening.

In operation the device is rolled along in front of the sweeper by the broom, either in the act of sweeping or by an occasional push, and may be readily guided and directed over the desired course.

By means of the above device the dirt and dust may be immediately caught as it comes from the broom and prevented from rising in clouds about the room to fill the air and settle upon valuable furniture, pictures, delicate curtains, and bric-a-brac, and will obviate almost entirely the use of the dusting-brush, thereby saving valuable articles from injury and destruction and enabling a room to be swept and cleaned in much less time than by the old method.

The many advantages derived from the use of the device will be readily seen. A sick-room may be swept without raising the windows or filling the air with dust to be breathed by the invalid. Rooms that are in constant use may be cleansed without having the windows opened for considerable time for the dust to settle and to be aired. A single room or part of a room may be swept without the use of the inconvenient hand-pan. The dirt is not carried over the entire length of the carpet so that it becomes rubbed into it, and the carpet may always be swept with the grain, which with fine velvet or Brussels carpet is of the utmost importance, as the action of the broom in the opposite direction will destroy its texture and smoothness of surface and wear it away more rapidly with the broom than the feet. Uncarpeted rooms may be swept without sprinkling, as the constant dripping of the water in the receptacle is sufficient to lay the dust. The sweeper's clothes and person are not covered with dust, and the occupants of the room need not leave it while the work is being done.

It is deemed unnecessary to further state the uses and advantages of my invention, as they are many and apparent.

What I claim as new is—

1. A dirt and dust receptacle mounted upon rollers with closed sides and back and open front, that may be pushed along before the sweeper by means of the broom to receive the dirt as it is swept up from the carpet at each stroke, substantially as described.

2. In a dirt and dust receptacle mounted upon rollers, the combination of a removable canopy with an open front that will catch the dust as it rises from the broom and deflect it into the receptacle, substantially as described.

3. In a dirt and dust receptacle mounted

upon rollers, the combination of the pan or box to receive the dirt, a hood to deflect the dust, and a water-sprinkler to lay the dust, substantially as described.

4. In a dirt and dust receptacle mounted upon rollers, the combination of a pan provided with a depressed bottom, a floor-board hinged to the front edge of the pan, and an opening near one corner of the pan to empty the contents thereof, substantially as described.

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