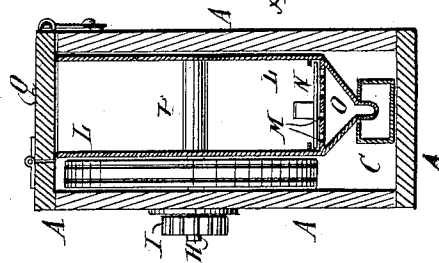


J. P. RYAN.
PAINTER'S SANDER.

Patented Aug. 25, 1885.



Chas. Nida.
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J. P. Ryan
BY Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOSEPH P. RYAN, OF NEW YORK, N. Y.

PAINTER'S SANDER.

SPECIFICATION forming part of Letters Patent No. 325,016, dated August 25, 1885.

Application filed July 10, 1884. Renewed July 20, 1885. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH P. RYAN, of the city, county, and State of New York, have invented certain new and useful Improvements in Painters' Sanders, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improvement. Fig. 2 is a plan view of the same, the top and cover being removed. Fig. 3 is a sectional side elevation of the same, taken through the line *x x*, Fig. 2. Fig. 4 is a sectional end elevation of the same, taken through the line *y y*, Fig. 3.

The object of this invention is to facilitate the application of sand to painted work in imitating the various kinds of sandstone, and in frosting and smalting such work.

The invention consists in the construction and arrangement of parts, as will be herein-after fully described and claimed.

A represents a box of convenient shape and size to be carried on the arm, and in the rear part of which is placed a fan-blower, B. The discharge-chute C of the fan blower B extends along the bottom of the box A and projects in tubular form from the forward end of the said box. The projecting part of the chute C may be made detachable, as indicated in Fig. 3, for convenience in storage and transportation.

Upon the projecting outer end of the chute C is fitted a curved mouth-piece, D, as shown in Figs. 1, 2, and 3, which may be turned upward, downward, or to either side to direct the current of air and sand in any desired direction without inclining the box A from a horizontal position, and thus without affecting the operation of the machine.

To the fan-shaft of the fan-blower B is attached a small pulley, E, around which passes an endless belt, F. The belt F also passes around a large pulley, G, attached to a shaft, H, which revolves in bearings in the sides of the box A, and to which is attached a small gear-wheel, I.

Into the teeth of the small gear-wheel I mesh the teeth of the large gear-wheel J,

journalled to the side of the box A, and which is provided with a handle, K, for convenience in turning it. With this construction a slow movement of the gear-wheel J will give a very rapid movement to the fans of the fan-blower B and force a strong blast of air out through the chute C.

In the forward part of the box A, in front of the fan-blower B, and above the chute C, is placed a box, L, of tin or other suitable material. In the middle part of the bottom of the inner box, L, are formed perforations M, which, when not required for use, are covered by a slide, N.

To the bottom of the box L, beneath the perforations M, is secured a chute, O, the sides of which incline inward and downward, and which has a downwardly-inclined groove or narrow passage in its bottom, which projects downward through and fits into a slot in the upper side of the chute C, and has its forward end open, so that the current of air passing through the chute C will take the sand and other substances that pass down into the chute O, carry them forward and discharge them against the work. With this construction the air from the chute C will be prevented from blowing up through the sand-box L and blowing off the mica, smalt, and other light substances which are necessary to give some kinds of work the required appearance, and which are applied with difficulty and great waste when the ordinary sanders are used.

The part of the shaft H that passes through the sand-box L is covered with a sleeve, P, to protect the said shaft from the sand. With this construction sanding can be done above and below the level of the sander or at either side of the line of the said sander without moving the sander from a horizontal position, and thus without interfering with the proper operation of the said sander.

The forward part of the box A is provided with a hinged cover, Q, for convenience in putting in the sand.

In using the sander it is carried upon the left arm, and the driving mechanism is operated with the right hand, the curved mouth-piece, when used, being turned as required to give the desired direction to the current of air and sand.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a painter's sander, the combination, with the inner box, L, having perforations M in its bottom, and the air-chute C, of the sand-chute O, having a downwardly-inclined sand-passage, substantially as herein shown and described, whereby the outflowing sand will be carried forward by the air-blast and the air will be kept from blowing up through the sand-box, as set forth.

2. In a painter's sander, the combination, with the inner box, L, having a sand-chute, O, provided with a narrow downward and forward inclined sand-passage, of the air-chute C, having an opening through which sand-chute projects, the delivery end of the said air-chute

being extended beyond the inclined passage of the sand-chute, whereby air from the air-chute will be prevented from being blown up into the box L, substantially as set forth.

3. As an improved article of manufacture, a painter's sander, consisting, essentially, in the casing A, rotary blower B, air-chute C in the bottom of the casing and projecting beyond the same, the sand-box L, perforations M in the bottom of the same, the horizontally-moving slide N, and the chute O, leading from the perforations into the air-chute C, substantially as set forth.

JOSEPH P. RYAN.

Witnesses:

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