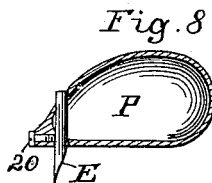
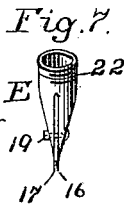
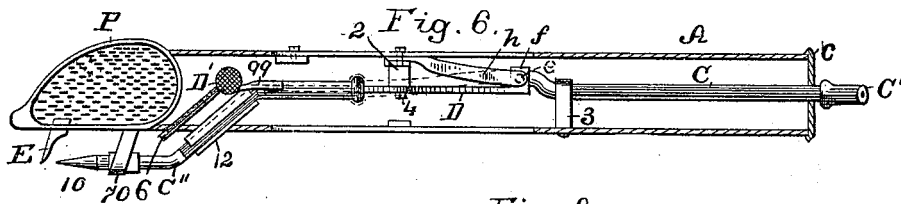
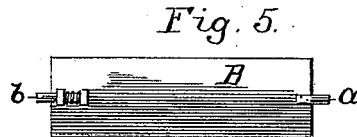
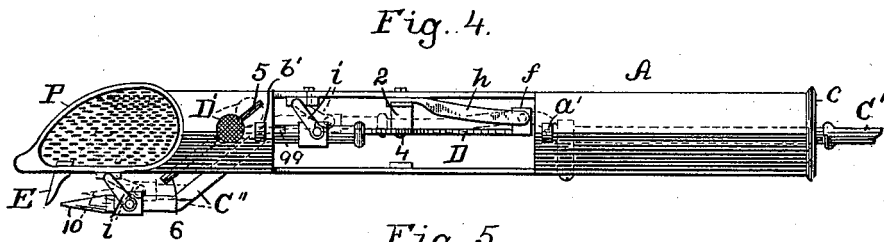
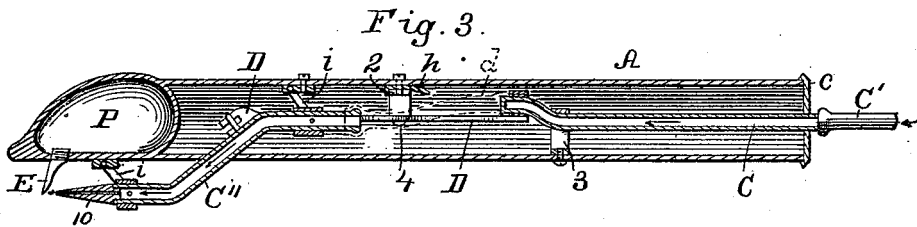
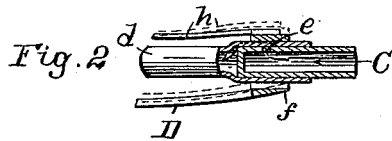
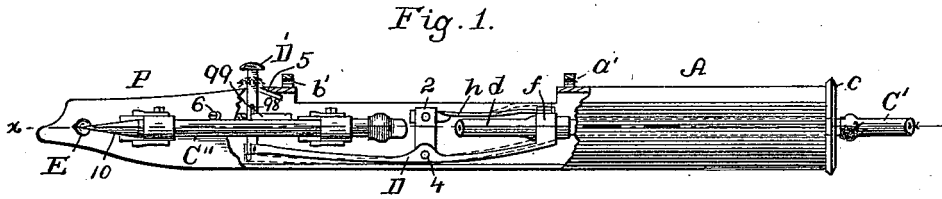


(No Model.)

C. L. BURDICK.
PAINT DISTRIBUTER.

No. 402,898.

Patented May 7, 1889.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES L. BURDICK, OF KANSAS CITY, MISSOURI.

PAINT-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 402,898, dated May 7, 1889.

Application filed March 13, 1888. Serial No. 267,096. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. BURDICK, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Paint-Distributers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to that class of instruments known as air-brushes adapted for use in distributing pigments by means of an air-blast in the production of pictures, landscapes, and other works of art.

In using my invention the pigment is carried in the way of the air-blast by means of a stationary conducting-surface, from which it is detached by said air-blast.

The object of my invention is to provide an air-brush which shall be of such size that it can be used as a pencil or pen, and thereby be employed with much more effect than those heretofore known. This object I attain by lessening the number of operative parts heretofore employed in instruments of this class and by making use only of such as can be placed in small compass. To further illustrate this, I will say that the instrument shown in the drawings is somewhat larger than full size; but it is evident that instruments of any desired size may be constructed in accordance with my invention.

With these ends in view my invention consists in the peculiar features of construction and combination of parts more fully described hereinafter and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation, a portion of the outer casing being broken away; Fig. 2, a detail view illustrating the construction of a blast-controlling valve used in making up my invention; Fig. 3, a sectional plan view taken on line *xx* of Fig. 1; Fig. 4, a plan view of the instrument, the cover being removed; Fig. 5, a view of the cover detached from the instrument; Fig. 6, a sectional plan view of the instrument, illustrating a modification in the manner of mounting the movable end of the air-tube; Fig. 7, a detail view of a pigment-conducting point used in making up the invention, and Fig. 8 a detail view illustrating a modification in the manner of mounting

and attaching the conducting-points to the pigment-receptacle of the instrument.

The letter A indicates the main portion or case of the instrument, which is preferably cylindrical or hexagonal in form, and may be of any suitable material. The pigment-receptacle P is placed at one end of said case, while the other end is closed by cap *c*, through which the air-tube C enters, the supply-hose C' being attached to the projecting end of said air-tube.

The pigment-receptacle P is in the form of a small dish, and it may be constructed as a part of the case or it may be attached thereto in any desired way. Removably inserted in one side of said pigment-receptacle is the pigment-conducting point E, which consists of a suitable cylindrical body portion provided with a screw-thread, 22, (or other suitable means for securing it to the said receptacle,) and a pointed portion which is split or bifurcated or divided into a pair of thin blades, 16, a narrow passage, 17, being left between the blades, as clearly shown in Fig. 7. If so desired, I provide the blades 16 with an adjusting bolt or screw, 19, which passes through them laterally, and by means of which they may be drawn nearer together when required. In the modification illustrated in Fig. 8 the point E is secured to the pigment-receptacle by means of a set-screw, 20, which passes through the end of said receptacle and engages said point E. For the purpose of disengaging the pigment from the point E, I make use of an air-blast, which is arranged as follows:

A blast-nozzle, 10, is located on the forward end of the air-tube, so as to discharge the air-blast upon the point E, and nearly at right angles thereto, the action of such blast being to disengage the pigment from the blades 16 and from the passage 17 between the blades, and distribute it in the form of a fine spray on the work. For the purpose of controlling said air-blast in its relation to said points, I make use of devices as follows: I divide the air-tube within the case A at about the center of its length, and connect the forward movable section, C'', with the rear section, C, by means of a short rubber tube, *d*, the construction being such as to allow the movable section C'' (which carries nozzle 10 at its for-

ward end) to be simultaneously moved in longitudinal and transverse directions or in a diagonal direction, for the purpose of moving it nearer to or farther from said point E, and so that the blast will strike the point nearer to or farther from its free end.

I prefer to mount the movable section C'' in a pair of swinging links, *i i*, which have one end connected thereto and the other end mounted in suitable bearings on the case A. This movable section, however, may be mounted in other ways, if so desired. For instance, in Fig. 6 I locate the straight body portion of section C'' in a suitable sliding bearing, 12, so that said section can be moved in the manner before described. When the latter construction is used, I provide the forward end of said section with an additional bearing in the shape of a guiding-bracket, 70, which is attached to one side of the case in any desired way. The blast-nozzle 10 has its posterior end threaded, or otherwise constructed, so that it may be disengaged from the forward end of section C'', as shown. The adjustment of the blast-nozzle, and also control of the air-blast, is accomplished through the medium of a vertical finger-piece, D', which projects through slot 5 in the case a sufficient distance to be engaged by the first finger of the operator's hand. The lower end of the finger-piece is pivoted to the forward end of a horizontal bar, D, which controls the air-valve, while its body is provided with a slot, 98, which is engaged by projection 99, located on movable section C''.

The bar D is pivoted at 4 to a suitable bracket, 2, located within the case, while its rear end is provided with a plate or valve, *f*, which extends up over the air-tube C, and normally rests in close contact with the rear end of hose *d*, and a suitable spring, *h*, urges said plate *f* down upon said hose. The rear end of hose *d* is drawn over the forward end of section C and over a small aperture, *e*, which is formed in the upper side of said section, as shown more clearly in Fig. 2.

When the plate *f* is raised by the action of the bar D, which also raises the spring *h*, as clearly shown in Fig. 2, the air within the air-tube will press the hose upwardly and the aperture *e* will be uncovered, thereby allowing passage of air to the nozzle 10. The tube C' is connected to an air-pump or any suitable device for forcing air into said tube, whereby as great a pressure of air as necessary may be admitted to the air-tube. Likewise, when said plate is depressed by the action of spring *h* (as it normally is) the supply of air will be cut off.

The operation of this construction is as follows: When the operator desires a blast, he depresses finger-piece D', which raises plate *f*, as before described, and when he desires to adjust the movable section C'' and the nozzle, in making heavier or lighter lines, he vibrates or moves said finger-piece back and forth in slot 5. It will thus be observed that the dis-

tribution of pigment and control of the air-blast are accomplished by the movement of a single finger-piece. Placing the nozzle 10 near the free ends of the blades 16 will make a fine line, and moving said nozzle farther therefrom will make a correspondingly heavy line, and vice versa. For the purpose of giving access to the working parts of the instrument, I may provide the case A with any suitable hinged or removable cover, such as B. This cover is provided with a projecting lug, *a*, at one end, which engages a suitable eye, *a'*, located on the case, while its opposite end is provided with a spring-lug, *b*, which is adapted to engage a corresponding lug, *b'*.

6 indicates an adjusting-screw, threaded into the front side of case A, so as to be engaged by finger-piece D' for the purpose of limiting the outward movement of said finger-piece.

Having thus described my invention, what I claim is—

1. The combination of a pigment-receptacle, a pigment-conducting point, and an air-blast nozzle adjustable in relation to said point, substantially as described.

2. In a paint-distributor, a bifurcated pigment-conducting point, in combination with an adjustable blast-nozzle arranged to discharge between the blades of the point, whereby the pigment is blown from between them, in the manner and for the purpose substantially as described.

3. In a paint-distributor, a bifurcated pigment-conducting point provided with mechanism for adjusting the blades thereof, in combination with an oscillating air-blast nozzle arranged to discharge between said blades, in the manner and for the purpose described.

4. In a paint-distributor, a pigment-conducting point, in combination with an oscillating blast-nozzle, and mechanism, substantially as described, for adjusting said nozzle toward and from said point, in the manner and for the purpose set forth.

5. In a paint-distributor, a bifurcated pigment-conducting point having adjustable blades provided with a set-screw, in combination with an adjustable air-blast nozzle, substantially as described.

6. In a paint-distributor, a pigment-receptacle having a conducting-point removably secured therein and provided with a set-screw, in combination with an air-blast nozzle, substantially as described.

7. The combination of an air-supply tube, an adjustable air-blast nozzle, a valve to control the air-supply to said tube, and a finger-piece connected with the valve and nozzle, whereby both are simultaneously operated, in the manner and substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES L. BURDICK.

Witnesses:

S. S. MOREHOUSE,
J. C. HIGDON.