

A. SINGER.
 POWDER BLOWER.
 APPLICATION FILED MAY 25, 1914.

1,142,636.

Patented June 8, 1915.

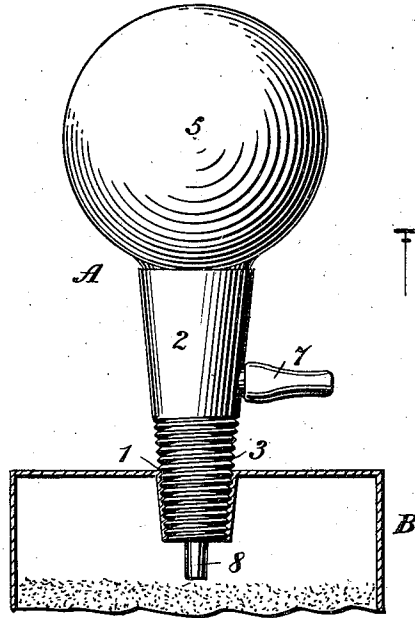


Fig. 1.

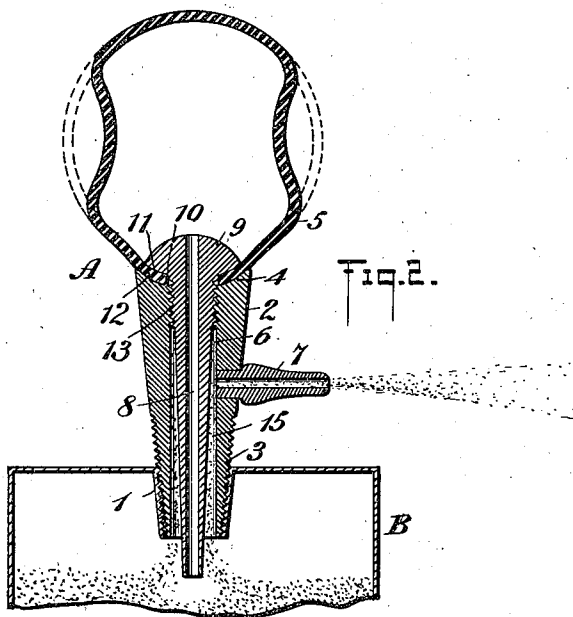


Fig. 2.

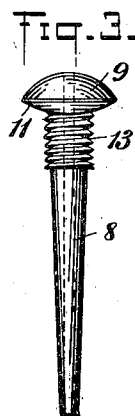


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

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POWDER-BLOWER.

1,142,636.

Specification of Letters Patent.

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Application filed May 25, 1914. Serial No. 840,823.

To all whom it may concern:

Be it known that I, AARON SINGER, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Powder-Blower, of which the following is a full, clear, and exact description.

This invention relates to powder blowers and more particularly to an attachment adapted to be applied to a can or container of powder whereby the powder can be forced out from the can or container by puffs.

The invention has for its general objects to provide a comparatively simple and inexpensive powder blower in the nature of an attachment which is easily and quickly applied to a container and is adapted to be used over and over again.

A further object of the invention is the provision of a powder discharging device which consists of a body having a bulb fastened thereto for forcing air into the powder container or can, whereby powder is discharged through the nozzle of the body, there being in the body a combined tube and bulb fastening device through which the air passes from the bulb to the can or container, and around this tube is provided an annular space through which the powder and air pass to the discharge nozzle.

With such objects in view, and others which will appear as the description proceeds, the invention comprises various novel features of construction and arrangement of parts which will be set forth with particularity in the following description and claims appended hereto.

In the accompanying drawing, which illustrates one embodiment of the invention, and wherein similar characters of reference indicate corresponding parts in all the views, Figure 1 is a side view of the powder blower shown applied to a powder container; Fig. 2 is a vertical section of the device shown in use; and Fig. 3 is a view of a combined bulb clamping device and air tube shown detached.

Referring to the drawing, A designates the powder blower and B a container or can for the powder. This can is provided with an opening 1 which may be threaded or otherwise formed to receive a plug or other stopper which is removed so that the opening 1 can receive the powder blower.

The powder blower comprises a body 2 made of any suitable material and of tubular form, the lower end of the body being shown threaded at 3 to screw into the opening 1. The upper end of the body has a conical or other shaped seat 4 against which the bulb 5 is clamped.

Communicating with the bore 6 of the body 2 is a laterally extending nozzle 7 through which the powder is blown out of the device.

Arranged within the body and extending longitudinally of the bore thereof is an air tube 8 which is of smaller diameter than the bore 6 so as to provide an annular passage up which the powder passes to the nozzle 7. The upper portion of this tube is formed into a head 9 which is considerably larger than the opening 10 in the bulb 5 provided to accommodate such head. The under side 11 of the head 9 cooperates with the seat 4 to clamp the marginal portion 12 around the opening 10 to the body 2 of the device. The air tube 8 is fastened in the body 2 by means of screw threads 13 engaging the threads 14 in the upper end of the bore 6 so that by relative turning of the parts 2 and 8 the bulb can be clamped tightly between the body 2 and head 9 to form an airtight joint, and to facilitate this relative turning of the parts the lower end of the air tube preferably extends out of the body 2 far enough to enable it to be grasped by the thumb and fingers of one hand while the other hand grasps the body 2.

In operation the bulb 5, which is normally filled with air, is compressed as shown in Fig. 2, whereby the air is forced downwardly through the tube 8 and into the container B. This air agitates the powder in the container so that the agitated powder is entrained with the air as it escapes upwardly through the annular passage 15 from which the powder discharges to the nozzle 7. When the bulb expands, the discharge of powder ceases as air is drawn in through the nozzle 7, passage 15, container B and air tube 8.

From the foregoing description taken in connection with the accompanying drawing, the advantages of the construction and method of operation will be readily understood by those skilled in the art to which the invention appertains, and while I have described the device which I now consider to be the best embodiment thereof, I desire to

have it understood that the device shown is merely illustrative, and that such changes may be made, when desired, as are within the scope of the appended claims.

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

10 1. A powder blower comprising a body having a bore extending therethrough and having a seat at one end and attaching means at the opposite end, a bulb having an opening, an air tube extending into the opening of the bulb and having a head disposed therein, means for fastening the tube and body together to clamp the bulb between the said seat and head, a discharge nozzle connected with the said body, and a passage in the said body communicating with the nozzle and through which powder discharges when air is forced from the bulb through the said tube.

25 2. A powder blower comprising a body having a bore extending therethrough, an internal thread in the outer end of said bore, a seat on the outer end of the bore, an air tube extending through the bore of the body and longer than the latter, a thread adja-

cent the outer end of the tube for screwing into the body, a head on the outer end of the tube, a bulb having an opening to accommodate the head and clamped between the latter and said seat, said tube being of less diameter than the bore of the body to form an annular powder discharging passage, and a nozzle connected with the body and communicating with the said passage.

35 3. A powder blower comprising a body having a bore, an air tube screw threaded in the bore and having a portion of less diameter than the bore to form a powder discharging passage, a nozzle on the body communicating with the said passage, a head on the tube, and air discharging means communicating with the air tube and clamped by the head of the latter against the said body.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

AARON SINGER.

Witnesses:

CEATHAM BRADWAY,
PHILIP D. ROLLHAUS.