

No. 876,362.

PATENTED JAN. 14, 1908.

F. B. LA MAY.
POWDER BLOWER.
APPLICATION FILED JULY 26, 1907.

FIG. 1.

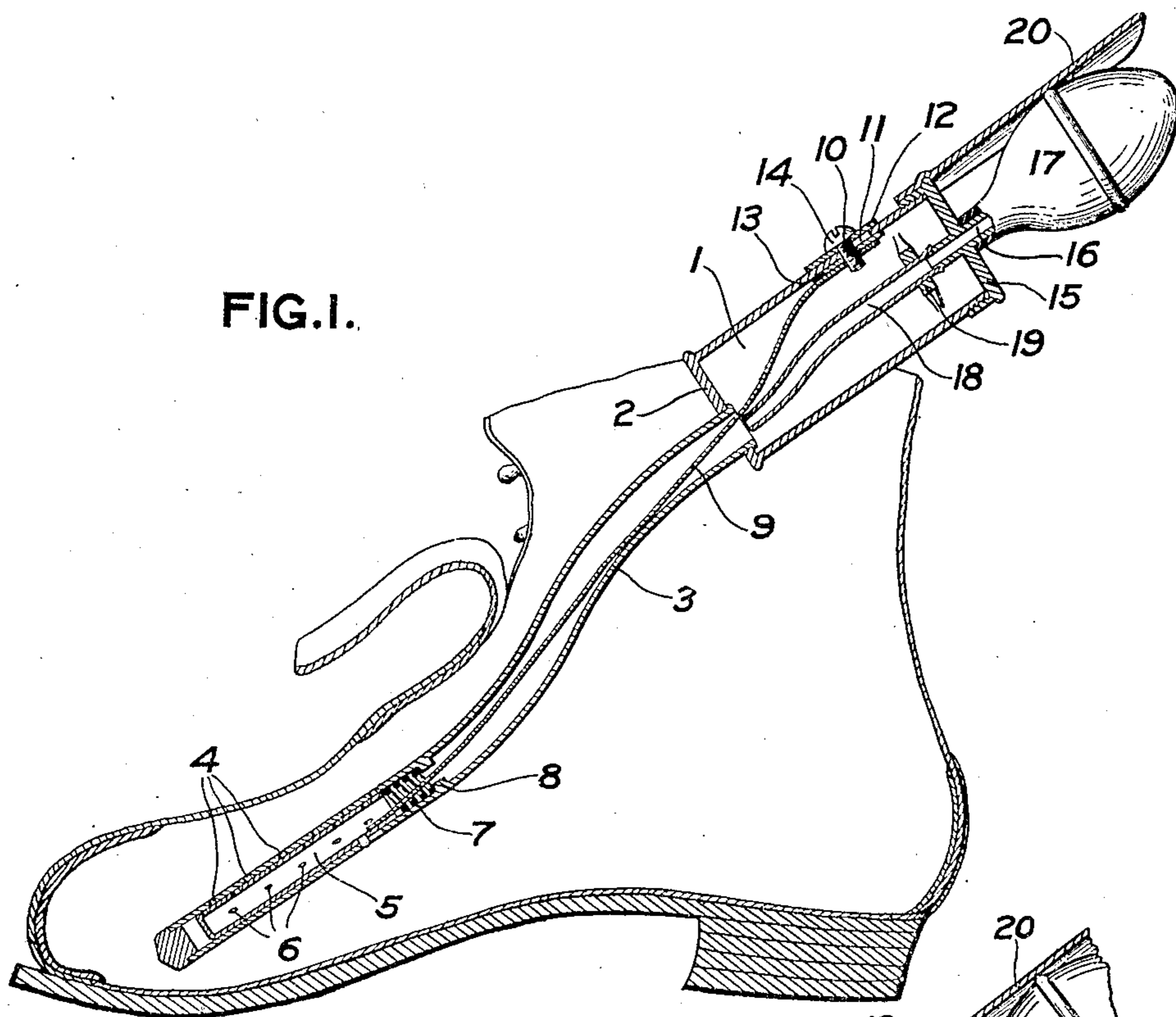


FIG. 2.

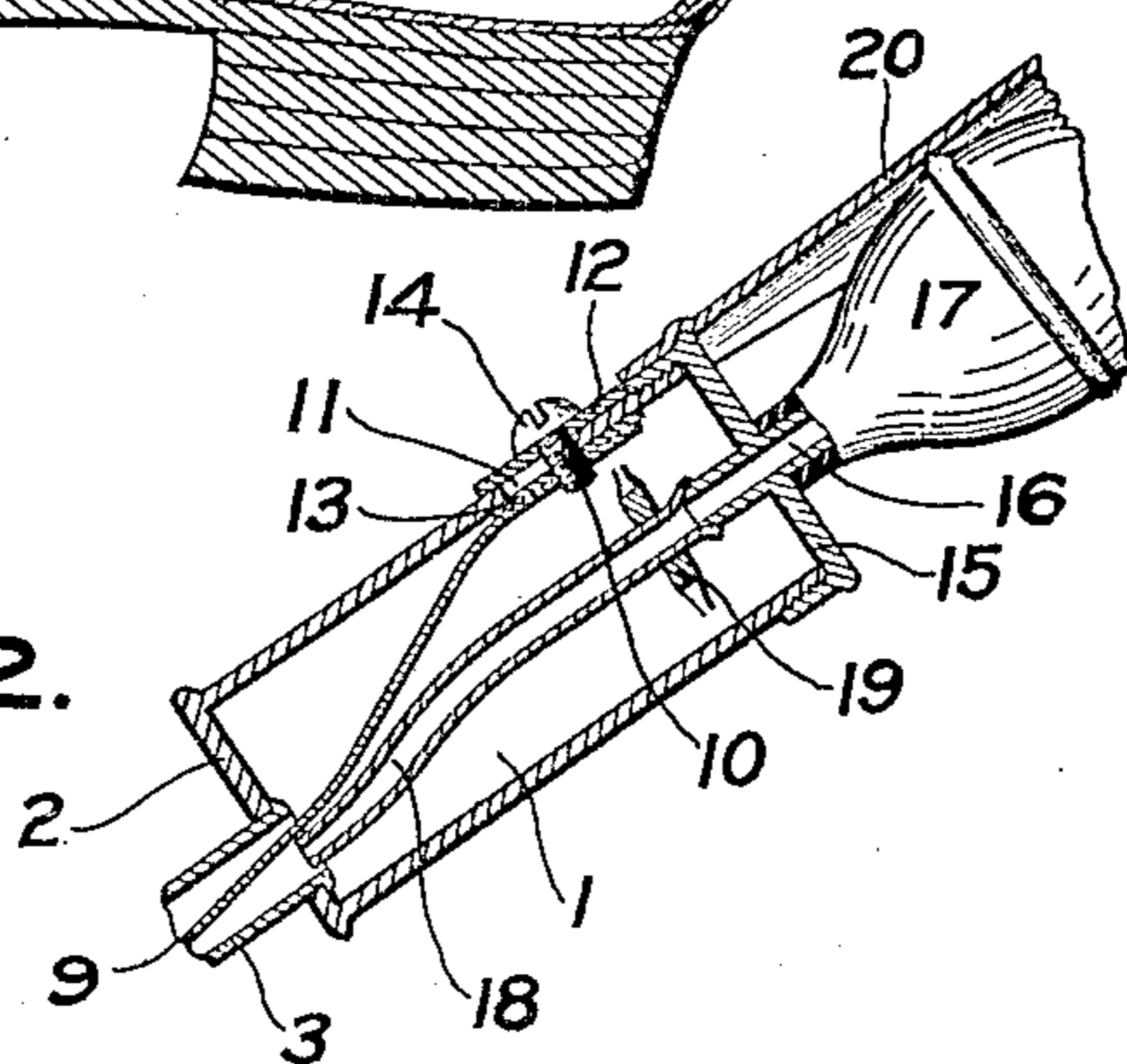
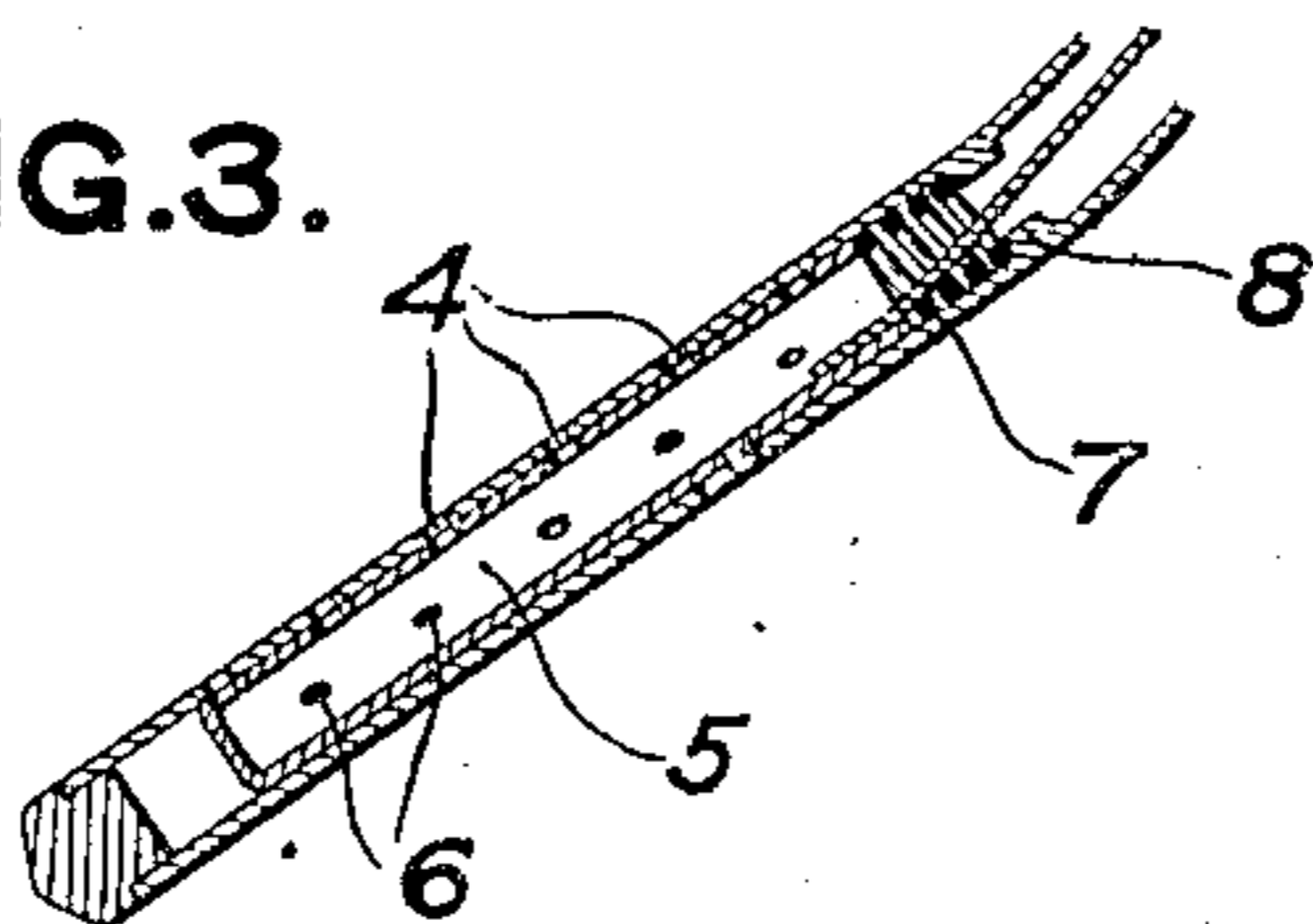


FIG. 3.



WITNESSES:
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UNITED STATES PATENT OFFICE.

FRANK B. LA MAY, OF ROCHESTER, NEW YORK, ASSIGNOR TO AMERICAN CHEMICAL MANUFACTURING & MINING COMPANY, OF ROCHESTER, NEW YORK.

POWDER-BLOWER.

No. 876,362.

Specification of Letters Patent.

Patented Jan. 14, 1908.

Application filed July 26, 1907. Serial No. 385,758.

To all whom it may concern:

Be it known that I, FRANK B. LA MAY, a citizen of the United States, and resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Powder-Blowers, of which the following is a specification.

This invention relates to powder blowers, and consists in the mechanism hereinafter described and claimed.

The object of the invention is to provide a device for distributing powder upon the inside of shoes or other cavities.

In the drawings:—Figure 1 is a longitudinal section of a device of a powder blower embodying this invention, shown in position in a longitudinal section of a shoe, and with its valve closed; Fig. 2 is a similar longitudinal section through the powder receptacle, with the parts in position for opening the valve; Fig. 3 is a longitudinal section of the valve and adjacent parts shown in the open position.

The blower has a powder receptacle 1 with a closed lower end 2, from which extends a powder tube 3. The powder tube is closed at its extremity as shown, and adjacent to such extremity has a series of perforations 4 for the emergence of the powder. A valve is employed to open and close these perforations. In the present instance this valve has a tube 5, having perforations 6 adapted to register with the perforations 4 in the powder tube. A spring 7 tends to hold the valve 5 in a position which closes the orifices or perforations 4. This spring may be arranged to perform this function in any suitable way, but in the present instance a projecting ring 8 is fastened in the powder tube, against which the coiled spring 7 abuts at one end, and the other end of the spring abuts against the valve tube 5. A band or rod 9 is attached at one end to the valve 5, and at the other end to a thumb piece 10 carried by the powder receptacle. This thumb piece 10 may conveniently pass through a slot 11, Fig. 2, in the wall of the powder receptacle 1, which slot is closed by a plate 12 sliding upon the said wall. A convenient arrangement is to have the plate 12 on the outside of the wall and to provide another plate 13 on the inside of said wall, to which the rod or band 9 is attached, and then to fasten the two plates

12 and 13 together, by means of a screw or bolt 14.

The band 9 is most conveniently made of a piece of thin flat, flexible metal, which may be thin steel, thin bronze, or other suitable metal. By the use of a flat band, which is considerably narrower than the diameter of the powder tube 3, not only is the powder, which may be in that tube, agitated so as to be kept loose, if any should lie in it, but also the greatest flexibility with the slightest impediment to the passage of powder is produced.

The powder receptacle 1 has a removable cap 15, provided with a nozzle 16, to which a compressible bulb 17 is attached. The nozzle 16 continues into connection with an air tube 18, fastened by a spider or other suitable support 19, in the interior of the receptacle 1, and having its lower end projecting into or adjacent to the upper end of the powder tube 3, so that when the bulb 17 is compressed a blast of air passes into the upper end of the powder tube, carrying powder with it from the receptacle 1 along the tube 3, and through the registering orifices, 6 and 4 of the valve and extremity of the powder blower, thus distributing powder within the cavity in which the tube is inserted.

On unscrewing the cap 15, the nozzle 16 is separated from the air tube 18, and the cap and bulb may be removed, in order to refill the receptacle. Adjacent to the bulb 17 is a guard plate 20 that is fastened to the cap 15, and is curved to fit the hand. It serves to prevent the bulb 8 from being accidentally twisted off the nozzle 7, and constitutes also the support against which the compression of the bulb may take place, and by which the device may be manipulated and directed into position while still maintaining the fingers in position to compress and release the bulb.

What I claim is:—

1. In a powder blower, the combination of a powder receptacle, a tube extending therefrom having a perforated end portion, means for causing a blast of air in the tube, a spring controlled valve for normally closing said perforated portion of the tube, a flexible band passing from said powder receptacle through said tube and connected to said valve, and means on the powder receptacle for actuating said band to open and close the valve.

2. In a powder blower, the combination
of a powder receptacle, a tube extending
therefrom having a perforated end portion,
means for causing a blast of air in the tube,
5 a spring controlled valve for normally closing
said perforated portion of the tube, a con-
nection passing through said tube to said

valve, and means for actuating said connec-
tion to open and to close the valve.

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Witnesses:

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