No. 794,122. PATENTED JULY 4, 1905.

L. ROSENGARTEN.

SAND BLAST DEVICE.

APPLICATION FILED NOV. 29, 1904.

FIG. 1.

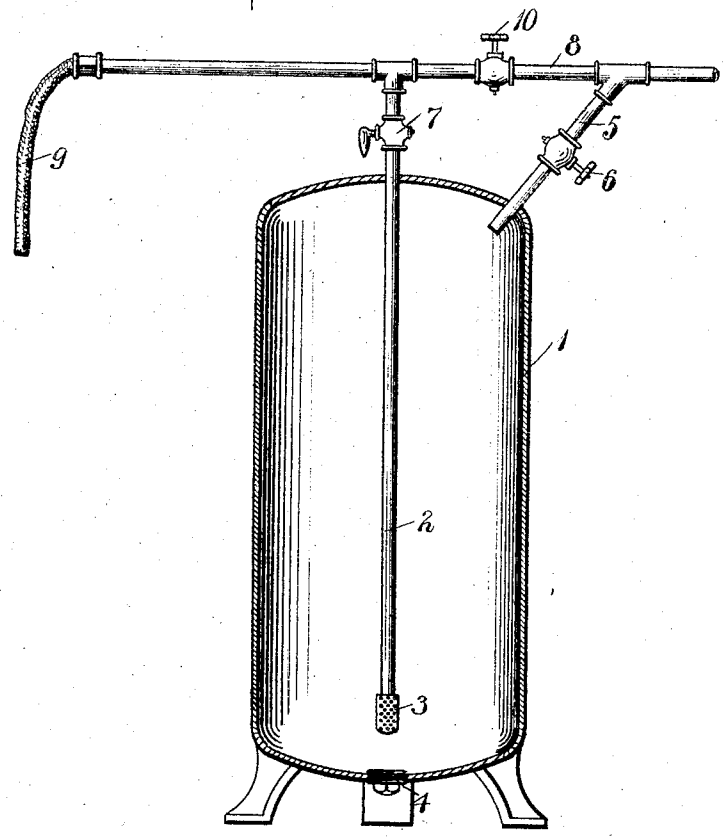
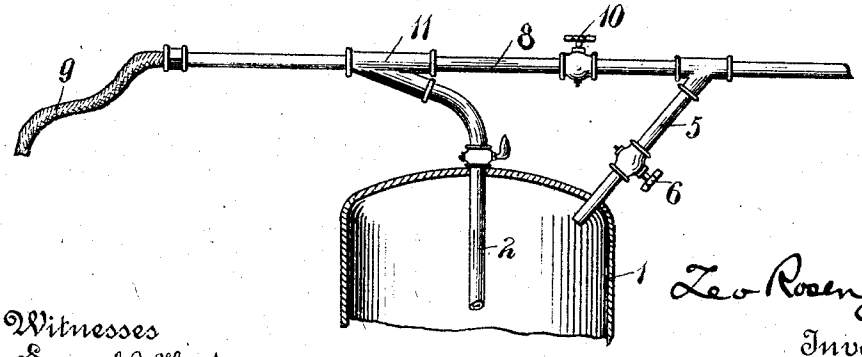


FIG. 2.



Witnesses
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No. 794,122. Patented July 4, 1905.

UNITED STATES PATENT OFFICE.

LEO ROSENGARTEN, OF NEW YORK, N. Y.

SAND-BLAST DEVICE.

SPECIFICATION forming part of Letters Patent No. 794,122, dated July 4, 1905.

Application filed November 29, 1904. Serial No. 234,810.

To all whom it may concern:

Be it known that I, LEO ROSENGARTEN, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Sand-Blast Devices, of which the following is a full, clear, and exact specification.

The object of my present invention is to provide an improved pneumatic blast device for use in renovating stone of all descriptions or for painting, but which may be used for other purposes.

More specifically, the object of my present invention is to provide an improved device which will be free from clogging, in which the feed of sand or paint to the point of application will be even and satisfactory, and a device which may be easily cleaned thoroughly without difficulty, as well as a device which is simple and inexpensive in construction. Such a device is clearly described in the following specification and is shown in the accompanying drawings, in which like reference-numerals represent like parts.

In the drawings, Figure 1 is a transverse section showing piping in elevation through my improved device; and Fig. 2 is a similar view of the upper portion of the device, illustrating slight modifications in the piping.

Referring now in detail to the drawings, 1 represents a reservoir of any suitable shape, but without a square corner where sand may lodge or accumulate—that is, my reservoir 1 is provided with a curvilinear interior. Reservoir 1 has extending longitudinally therein to a point near one end thereof an outlet-pipe 2, at one end of which is a screen 3 with perforations therein of suitable size to prevent conglomerated particles of sand from passing into said pipe 2. In line with screen 3 in the end of the reservoir 1 adjacent said screen is a suitable opening 4, closed by a plug 5, which opening is provided for purpose of cleaning or removing the screen 3 or for other purposes.

5 is a compressed-air or other fluid-supply pipe tapped into the reservoir 1 in the end thereof opposite screen 3. Pipe 5 is controlled by a plug-valve or other valve 6. Outlet-pipe 2 is controlled by a suitable valve 7. Pipes 2 and 5 are both tapped in by means of unions to a compressed-air or other suitable pressure pipe 8, connecting at one end (not shown) with a suitable source of compressed-air or other pressure supply and at its opposite end with the flexible tubing 9, carrying the nozzle. (Not shown.) Pipe 8 is controlled by a suitable valve 10.

In Fig. 2 I have shown a slight modified structure in the connection between the pressure-pipe 8 and the outlet-pipe 2, wherein I tap the pipe 2 into the pipe 8 at the smallest possible angle by the use of the union 11. The reservoir may be mounted on suitable supports which may rest horizontally or vertically.

The use of the device is as follows: The reservoir 1 having been supplied with sand and the pipe 8 being supplied with a suitable fluid—such, for instance, as compressed air—the valves 6, 7, and 10 are opened. The fluid under pressure escaping past the ~~pipe~~ 2 through the pipe 8 creates a suction which will draw sand past the screen 3 through pipe 2 and forces the same out through the flexible tubing 9 to the nozzle. The application of pressure to the end of the reservoir 1 opposite screen 3 materially assists in lifting the sand through the pipe 2. The screen 3, as has been stated, prevents lumps of sand from passing into the pipe 2.

With the form of structure shown in Fig. 2 the sand entering pipe 8 in substantially the same direction as the travel of the fluid-pressure, the suction is materially increased, adding to the effectiveness of the device. I do not wish to be limited to the exact details of the structure herein shown and described.

Having thus described my invention, the following is what I claim as new and desire to secure by Letters Patent:

1. In a sand-blast device the combination with a reservoir, of an outlet-pipe extending from a point above said reservoir centrally to and having its mouth at a point within and adjacent the bottom of said reservoir, a pressure-pipe extending past and connected to the upper end of said outlet-pipe and a connecting-pipe between said pressure-pipe and the top of said reservoir.

2. In a sand-blast device the combination with a reservoir, of an outlet-pipe extending from a point above said reservoir centrally to and having its mouth at a point within and adjacent the bottom of said reservoir, a pressure-pipe extending past and connected to the upper end of said outlet-pipe, a connecting-pipe between said pressure-pipe and the top of said reservoir, a screen covering the lower end of said outlet-pipe, and a hermetically-sealed opening at the lower end of said reservoir adjacent the mouth of said outlet-pipe.

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Witnesses:
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