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W. C. MAUNEY ET AL

SAND BLAST SYSTEM

Filed March 30, 1925

Fig. 1.

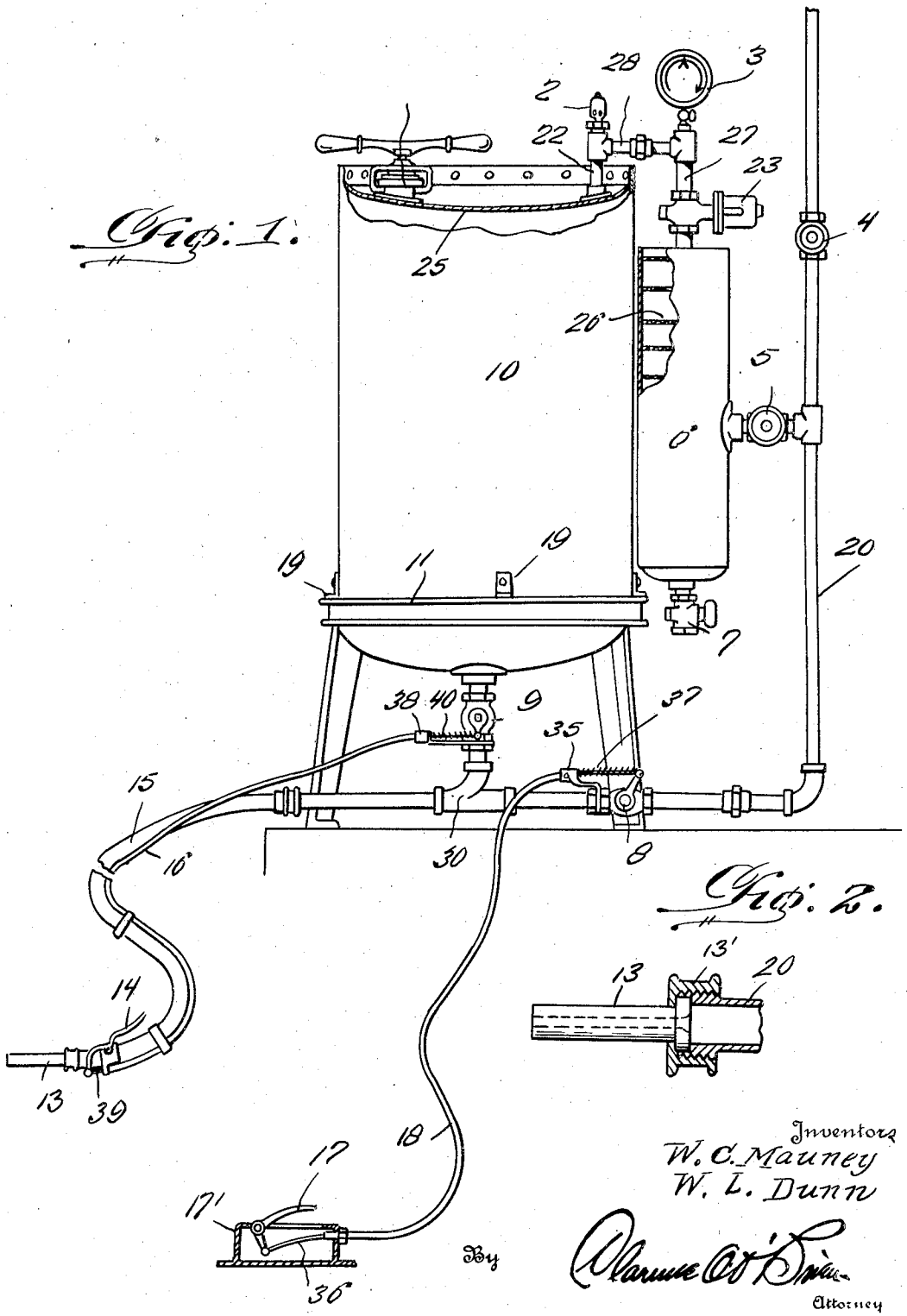


Fig. 2.

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SAND-BLAST SYSTEM.

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The present invention relates to a sand blast system for lettering, carving, cleaning and cutting granite, marble, brick work castings, painted metal, and wood work, also for etching, cutting and boring glass. The device is also efficient in frosting on any and all material.

An important object of the invention is to provide an improved system of control for the sand blast system, wherein different pressures may be used, thereby taking less sand or abrasive material, as well as less air to do the same amount of work as with an equalized system, so that the operator has working control by hand over the sand or abrasive material, and by foot, over the air which gives him absolute control over cutting as to its finish.

Another important object of the invention is to provide a nozzle formed of lava material, whereby the same will last considerably longer than the nozzles now in common use.

With the above and other objects in view, as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawing:

Figure 1 is an elevation of the sand blast system embodying the features of my invention, portions being shown in section, and

Figure 2 is a detail view of the blast nozzle.

Referring to the drawing in detail, it will be seen that the numeral 10 indicates the sand or abrasive tank, having the foot support ring 11 held in place by lugs 19. The upper end of the tank is held in place by the crimped head 25, which eliminates the necessity of a man hole and inside riveting. A filler and filter cap 1 is provided in the head 25. An air inlet 22 communicates with the tank 10 through the head 25, and has a safety valve 2 at the outer end thereof. An air filter 6 with a plurality of baffle plates 26, in the upper half thereof, is located alongside of the tank 10. A pipe 27 rises from the filter 6 and has therein a pressure reducing valve 23 disposed intermediately thereof and at its end a pressure air gage 3. A pipe 28 connects the pipe 27 with the air inlet 22. A valve 5 connects the filter 6 with the air line 20. A valve 4 is provided in the air line above the valve 5. Another valve 8 is provided in the air line below the valve 5. A valve 9 is disposed at the bottom of the tank 10, and connects with the line 20, through an injector 30. A valve 8 is located between the injector 30 and the valve 5. The filter 6 is provided with the drain valve 7. The valve 9 is hand operated, while the valve 8 is foot operated. A flexible sand hose 15 leads from the end of the line 20 beyond the ejector 30. A nozzle 13 is mounted on the end of the flexible hose 15 and is constructed of lava so as to eliminate to a minimum the wear occasioned by sand or other abrasive passing therethrough. A flexible tube 18 leads from the bracket 35 on the valve 8, and a flexible wire 36 passing therethrough engages the crank of the valve 8, and a foot operated lever 17 is mounted in the casing 17′, so that the operator may place his foot on this lever and open the valve 8, a spring 37 being provided for normally holding the valve closed. A tubing 16 is mounted alongside of the flexible hose 15 and is attached at 38 to the valve 9. A flexible wire 39 passes through this hose and is attached to a lever 14, which the operator may grasp with his hand, while directing the nozzle so as to open the valve 9, the springs 40 normally holding this valve closed.

From the above detailed description, it will be evident to those skilled in the art, that as the operator is directing the sand he may control the amount of sand or abrasive material passing through the nozzle, and may also regulate and control the amount of air being injected into the sand or abrasive, thereby attaining the numerous advantages heretofore pointed out, and others which will appear as the device is actually being used.

Although we have illustrated and described our invention in considerable detail, it is apparent that the present embodiment has been given merely by way of example, and that numerous changes in the details of construction, in the materials, in the sizes, and in the combination and arrangement of parts may be resorted to, without de-

parting from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

Having thus described our invention, what we claim as new is:

1. A sand blast system including among other elements a sand tank, an air line, an injector associated with the air line and the sand tank, a nozzle, a valve between the injector and the said tank, a second valve in the air line, foot operated means for the second valve, and hand operated means for the first valve on the nozzle.

2. A sand blast system of the class described including in combination an abrasive tank, an air line, means connecting the air line with the top of the tank, filter means in said means, a valve leading from the bottom of the tank, an ejector in the air line and connected to said valve, a second valve in the air line, foot control means for the second valve, a hose leading from the ejector, and a nozzle on the hose, means on the nozzle for controlling the first valve.

In testimony whereof we affix our signatures.

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