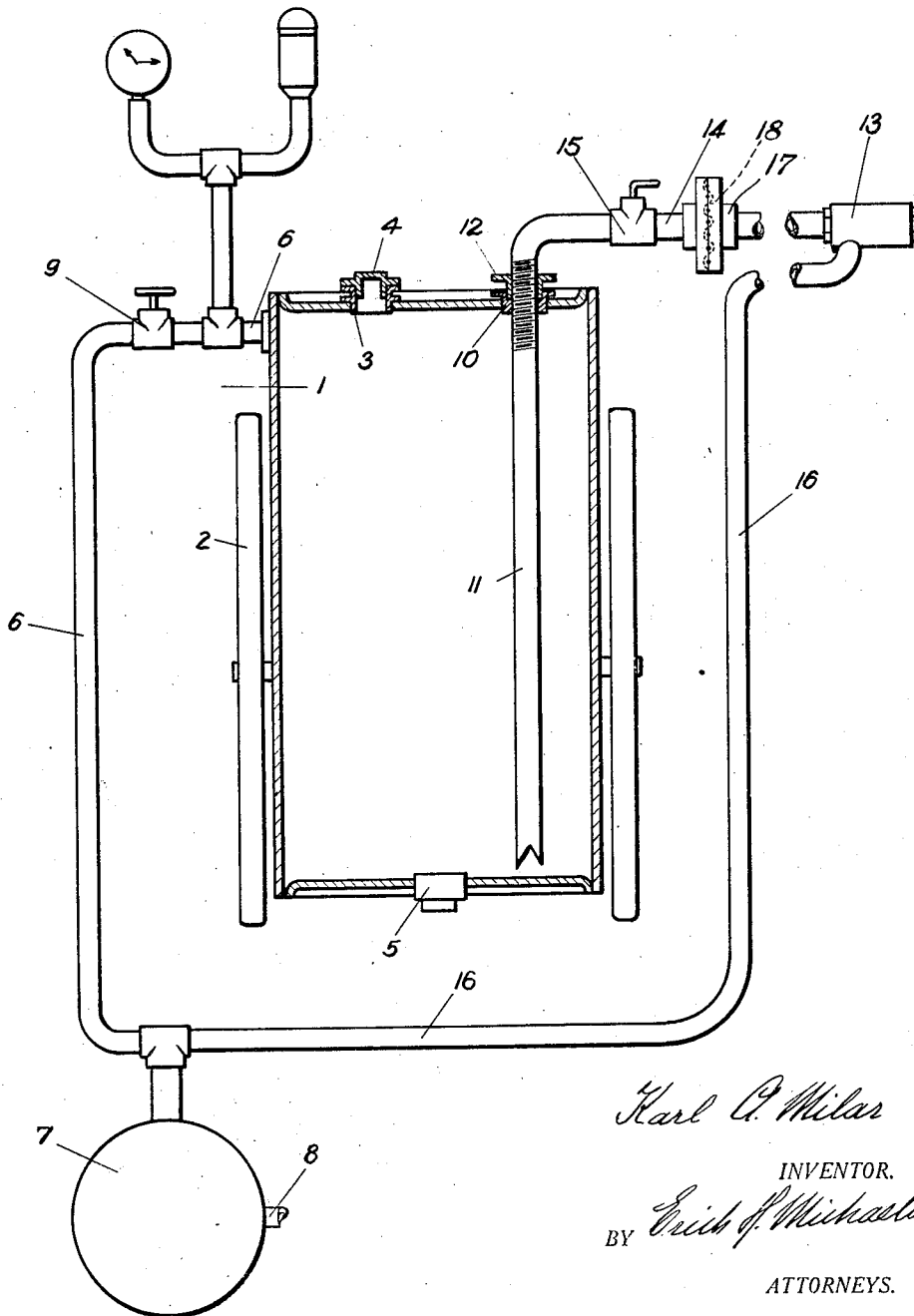


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PROCESS FOR ATOMIZING AND SPRAYING SEMIFLUID
MATERIAL CONTAINING ASBESTOS FIBER
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PROCESS FOR ATOMIZING AND SPRAYING SEMIFLUID MATERIAL CONTAINING ASBESTOS FIBER

Application filed November 28, 1927. Serial No. 236,147.

The invention relates to a process for atomizing and spraying material of a pasty consistency and density and containing asbestos-fiber in its natural state and it also relates to the apparatus used to execute the process mentioned.

Spraying apparatus for atomizing fluids such as paint, lacquers, varnishes or the like are well known, but heretofore it has been impossible to use the atomizing method for spraying material such as for instance cements which contain as stated above asbestos-fiber and are of a thick, pasty consistency.

The object of the invention therefore is, to create a process whereby it will be possible to atomize and spray a material of the above identified character under ordinary atmospheric conditions.

A further object of the invention is to provide an apparatus adapted to execute the said process.

The drawing illustrates diagrammatically a plant or apparatus for spraying a semi-fluid material containing asbestos fiber.

It is to be noted that the invention is not to be restricted or limited to the exact construction of the apparatus shown in the drawing or to the exact method described in the annexed specification, but that such changes and alterations may be made as fall into the scope of the claim appended hereto.

The apparatus consists of a container 1 which is supported by a stand 2. In the top wall of the container an inlet 3 is provided through which the material having a semi-fluid consistency and containing asbestos fiber in a solid undissolved condition may be introduced into the container. Said opening is to be closed by a screw cover 4. In the bottom wall of the container an opening is provided which is closed by means of a screw plug 5. This opening serves the purpose of cleaning the container. The container may be of any construction but must be strong enough to resist an inner pressure.

Adjacent the top, a pipe 6 communicates with the interior of the container 1 and leads to a source of compressed air, for instance, a tank 7 connected by means of a duct 8 with

a compressor (not shown). If desired the pipe 6 may be connected directly to a compressor. A valve 9 is inserted in the pipe 6 in order to regulate the flow of compressed air into the tank 1. In the top wall of the tank a second opening 10 is provided. Through this opening a pipe 11 extends into the interior of the tank and nearly to the bottom of said tank. A stuffing box 12 surrounds said pipe 11 and prevents any leakage of compressed air or any material contained in the tank alongside of the pipe 11. This pipe 11 carries at its outer end a valve 15 carrying this pipe with a flexible tube 14. The tube carries a reducing coupling 17 and in this coupling a perforated disk or strainer 18 is provided serving as a filter as will be described later on. The other end of the tube 14 is connected to a spray gun 13.

From the source of compressed air, a flexible tube 16 leads to the spray gun 13 and connected with the inlet for the air used for atomizing the material conducted to the gun through the pipe 11 and the tube 14.

The apparatus is used as follows: The cement or other pasty material is introduced to the tank 1 through the opening 3 in the top of said container. The cover 4 is screwed down tightly to close said opening. The valve 9 is then opened so that the compressed air may enter the container 1 and under the pressure of said compressed air the material will be forced upwardly in the pipe 11. When then the valve 15 is opened the material will flow under the pressure of the air through the reducing coupling 17 whereby too heavy material that is the larger particles of asbestos fiber will be retained by the perforated disk 18. The material passing this disk will enter the spray gun 13 through the other portion of the tube 14. At the same time compressed air will flow through the pipe 16 from the source of compressed air 7 into the air by-pass of the spray gun through the tube 14.

Having described my invention and how the same is to be performed, I claim as new and desire to secure by Letters Patent:

The herein described process which includes first providing a semi-fluid material

containing fibrous matter; forcing said material by means of compressed air, into and through a spray gun and, while forcing said material to the spray gun, straining the larger particles of fibrous matter therefrom; and
5 atomizing said material, including the fibrous matter, by separately supplying compressed air to the spray gun.

In witness whereof I affix my signature.

KARL A. MILAR.

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