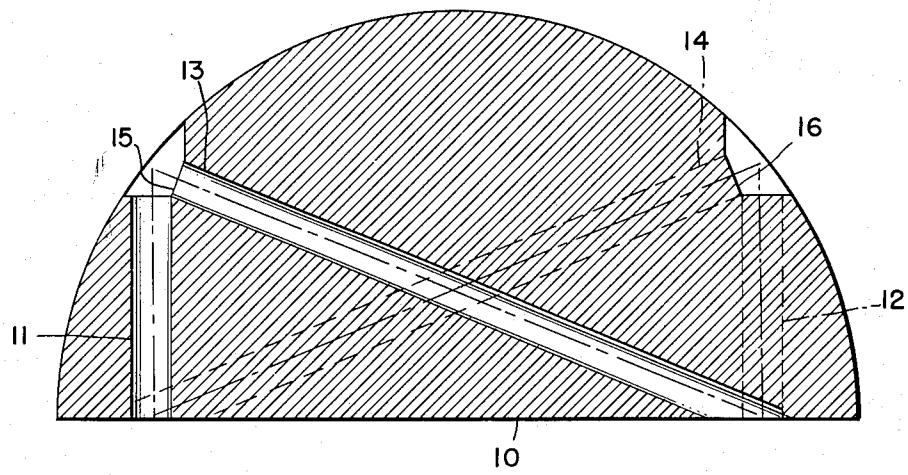
April 17, 1956 F. BORGES 2,742,326

ATOMIZER HEADS

Filed Nov. 23, 1953



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United States Patent Office 2,742,326 Patented Apr. 17, 1956

2,742,326

ATOMIZER HEADS

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Application November 23, 1953, Serial No. 393,868

4 Claims. (Cl. 299—140)

This invention relates to an atomizer head and more particularly it refers to an atomizer device which is adapted to atomize fluids supplied thereto, by producing a controlled impact of at least two liquid veins so that said veins will be atomized at the point of impact.

This atomizer head may be used in all type of instruments and apparatus, wherein an atomization or spraying action is required, such as for instance it may be applied to agricultural machines for spraying insecticides for combatting plagues and the like.

Bearing in mind the above, the present invention relates to an atomizer head for atomizing fluid veins, comprising a body having at least two faces, a first channel and a second channel in said body and each having a first end and a second end, said first ends of said first and second channels being separated from each other and disemboguing in at least one face of said body, said second ends of said first and second channels disemboguing in another face of said body into a common outlet so that the fluid veins emerging out of said first and second channels will meet at said common outlet and atomize there by the effect of the impact.

It is therefore an object of the present invention to provide an atomizer head of simple structure.

It is another object of the present invention to provide an atomizer head which does not require an ejector nozzle as the common type of atomizer heads, so that obstructions, so common in the known systems are avoided.

These and further objects and advantages of the present invention will become more apparent during the course of the following description taken in conjunction with the accompanying drawing in which the single figure presented is a longitudinal section of an illustrative embodiment.

Referring more particularly to the drawing, an atomizer head has been shown comprising a base face **10** into which the channels **11**, **12**, **13** and **14** disembogue. Channels **11** and **13** disembogue into the common outlet **15** and channels **12** and **14** disembogue into the common outlet **16**.

The supply ends of channels **11** and **14** as well as of channels **12** and **13** disembogue into respective common orifices.

It has still to be added that in case the spray is to be controlled in its spraying direction and shape, that it is necessary that the veins of the two channels, meeting in a common outlet, will have their impact area within the common outlet. The shape of the spray depends on the location of the level of said impact area with regard to the face of the atomizer head in which the common outlet is located.

I claim:

1. An atomizer head for atomizing fluid veins, comprising a body having at least two faces, a plurality of separated common outlets in said body, a first plurality of channels and a second plurality of channels in said body, each channel of said pluralities of channels having a first end and a second end with the first ends of each plurality of channels communicating with a different one of a plurality of separated inlets, said pluralities of channels forming a plurality of pairs of channels, each pair consisting of one channel of said first and second pluralities of channels, said second ends of each pair of channels meeting in a different one of said common outlets of said plurality of common outlets, said first ends of each pair of channels disemboguing in at least one different face than the corresponding face to the respective common outlet of said pair of channels, the axes of each pair of channels being so arranged that they intersect in said respective common outlet so that the fluid veins emerging out of each pair of channels will meet at said common outlet and atomize there by the effect of the impact.

2. An atomizer head for atomizing fluid veins, comprising a body having at least two faces, a plurality of separated common outlets on at least one of said faces and a plurality of common inlets on at least one other of said faces, a plurality of channels in said body, said inlets being common to at least two of said channels with each channel leading from a common inlet terminating in a different one of said outlets in a face other than the face in which said common inlet is positioned, each of said outlets being common to at least two of said channels with the axis of each channel leading to a common outlet being arranged to intersect in said common outlet so that the fluid emerging from said channels leading to a common outlet will meet within said common outlet and atomize by the effect of the impact.

3. An atomizer head for atomizing fluid veins, comprising a body having a flat base face opposite a curved second face, a plurality of channels in said body, said channels extending from said base face to an outlet in said curved face, at least two of said channels originating in a first common inlet at one side of said base face, one of the channels originating in said first inlet terminating in a first outlet in said curved face on the same side of said body as said first inlet, another of said channels originating in said first inlet terminating in a second outlet in said curved face on the opposite side of said body as said first inlet, at least two other of said channels originating in a second common inlet at the opposite side of said base face, one of the channels originating in said second inlet terminating in said first outlet and another of said channels originating in said second inlet terminating in said second outlet.

4. An atomizer head as recited in claim 3 in which the axis of each channel leading to a common outlet is arranged to intersect in said common outlet so that the fluid emerging from said channels leading to a common outlet will meet within said common outlet and atomize by the effect of the impact.

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