





# UNITED STATES PATENT OFFICE.

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## DISTRIBUTING APPARATUS.

963,470.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, FRANCIS I. DU PONT, a citizen of the United States, residing at Wilmington, county of Newcastle, and State of Delaware, have invented a new and useful Improvement in Distributing Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to a novel construction of distributing apparatus which will receive a liquid or semiliquid in a single inlet and continuously deliver the liquid and at the same time deliver it consecutively and in like amounts through a plurality of outlets.

I will first describe the embodiment of my invention illustrated in the accompanying drawings, and then point out the invention in the claims.

In the drawings: Figure 1 is a detail view, partially in section, of an embodiment of my distributor. Fig. 2 is a top plan view partially in section of same, with a portion of casing removed.

This distributor consists of the casing, in which is the inlet 6, into which passes the pipe *m* and from which casing pass the outlets 7. In the casing is the valve 8, having a passage 9. The outlets 7 are of considerable length, being of considerably greater extent than the comparatively thin walls or partitions 20 separating said outlets from each other. The width of these walls or projections is less than the diameter of the passage 9, so that, in the rotation of the valve, there is a continuous delivery. This valve is mounted upon the shaft 2, so as to rotate in the casing. It is rotated quite rapidly, and, in the rotation of the shaft, the passage 9 registers consecutively with the passages 7, by which means a like amount of material is delivered through each outlet.

Having now fully described my invention, what I claim and desire to protect by Letters Patent is:

1. A distributing apparatus comprising, in combination, a casing, there being an inlet to said casing, and a plurality of outlets therefrom, a rotary valve in said casing, the inlet being in alinement with the axis of rotation of the valve, there being a passage in

said valve in alinement with the inlet, and a passage in said valve in constant communication with the first mentioned passage, and adapted in the rotation of the valve to successively communicate with the outlets, the diameter of said passage in the valve communicating with the outlets being greater than the width of the walls between the outlets.

2. A distributing apparatus comprising, in combination, a casing, a rotary valve, there being a passage in said valve in constant communication with the inlet, and a plurality of outlets successively brought into communication with the passage in the rotation of the valve, the diameter of the passage being greater than the width of the walls between the outlets.

3. A distributing apparatus comprising, in combination, a casing, a rotary valve in said casing, there being a passage through said valve, one end of said passage being in the axis of rotation of said valve, there being an inlet in alinement with the axial end of said passage, there being a plurality of outlets, the opposite end of said passage in the rotation of the valve, successively communicating with the outlets, the diameter of the passage being greater than the width of the walls between the outlets.

4. A distributing apparatus comprising, in combination, a casing, there being an inlet to said casing, and a plurality of outlets therefrom, a rotary valve in said casing, the inlet being in alinement with the axis of rotation of the valve, there being a passage in said valve in alinement with the inlet, and a passage in said valve in constant communication with the first mentioned passage, and adapted in the rotation of the valve to successively communicate with the outlets, the diameter of said passage in the valve communicating with the outlets being greater than the width of the walls between the outlets, and the outlet passages being of substantially greater width than the width of the walls between the outlets.

5. A distributing apparatus, comprising, in combination, a casing, a rotary valve, there being a passage in said valve in constant communication with the inlet, and a plurality of outlets successively brought into communication with the passage in the rotation of the valve, the diameter of the



passage being greater than the width of the walls between the outlets, and the outlet passages being of substantially greater width than the width of the walls between the outlets.

5 6. A distributing apparatus comprising, in combination, a casing, a rotary valve in said casing, there being a passage through said valve, one end of said passage being in  
10 the axis of rotation of said valve, there being an inlet in alinement with the axial end of said passage, there being a plurality of outlets, the opposite end of said passage in the rotation of the valve successively communicating with the outlets, the diameter of  
15 the passage being greater than the width of the walls between the outlets, and the outlet passages being of substantially greater width than the width of the walls between the  
20 outlets.

7. A distributing apparatus comprising, in combination, a casing, there being an inlet to said casing, and a plurality of outlets therefrom, a rotary valve in said casing, the  
25 inlet being in alinement with the axis of rotation of the valve, there being a passage in said valve in alinement with the inlet, and a passage in said valve in constant communication with the first mentioned passage,  
30 and adapted in the rotation of the valve to successively communicate with the outlets, the outlet passages being of substantially

greater width than the width of the walls between the outlets.

8. A distributing apparatus, comprising, 35 in combination a casing, a rotary valve, there being a passage in said valve in constant communication with the inlet, and a plurality of outlets successively brought into communication with the passage in the  
40 rotation of the valve, the outlet passages being of substantially greater width than the width of the walls between the outlets.

9. A distributing apparatus comprising, 45 in combination, a casing, a rotary valve in said casing, there being a passage through said valve, one end of said passage being in the axis of rotation of said valve, there being an inlet in alinement with the axial end of said passage, there being a plurality of  
50 outlets, the opposite end of said passage in the rotation of the valve successively communicating with the outlets, the outlet passages being of substantially greater width than the width of the walls between the out- 55 lets.

In testimony of which invention, I have hereunto set my hand, at Wilmington, Del., on this 23d day of July, 1909.

FRANCIS I. DU PONT.

Witnesses:

WM. S. LANIAR,  
GORDON L. NAYLOR.