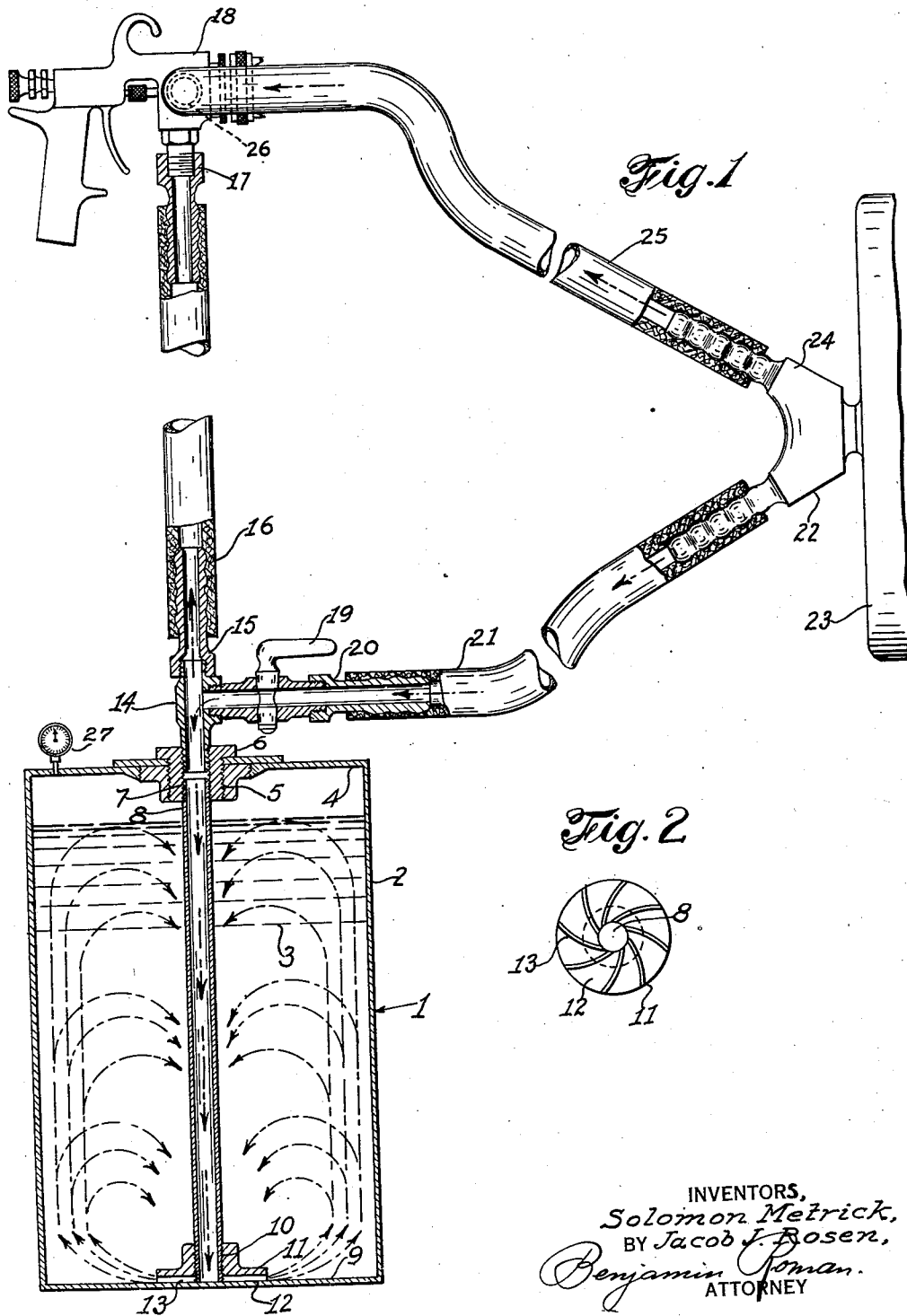


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PAINT SPRAYING APPARATUS
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PAINT SPRAYING APPARATUS

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1 Claim. (Cl. 299—89)

This invention relates to an apparatus for therewith spraying paint or other materials, such as lacquer or enamel, for applying a coating of the material upon any required surfaces.

5 The principal object of the invention is to provide an apparatus for the above purpose which will be simplified, efficient, strong, durable, conveniently and economically manufacturable, reliable, and improved.

10 Another object is to provide such apparatus with efficient and improved means for effecting a thorough admixture of the substances comprising the coating material prior to and in the course of its application upon the work.

15 Other objects and advantages will hereinafter appear.

In the accompanying drawing—

Fig. 1 is a general cross-sectional elevational view of the paint spraying and applying apparatus of the invention.

20 Fig. 2 is a bottom plan view showing a detail of the apparatus.

The apparatus 1 is equipped with an upright cylindrical tank 2, serving as a receptacle for the compound liquid 3 which may consist of paint, lacquer, or enamel, or any other coating material. In the roof-wall 4 of tank 2 is provided a tapped opening 5, in which is threaded a fitting 6 having a tapped bore 7 in which is in turn threaded a pipe 8 that projects downwardly therefrom toward and to the floor 9 of the tank. The terminal of pipe 8 has secured thereto, by a thread 10, a flange 11 which abuts against the floor 9 and its abutting face 12 is provided with a series of curved radiating channels 13, as illustrated in Fig. 2, that lead from the bore of the pipe 8 into the liquid contents of the tank 2. One end of a T-fitting 14 is threaded into the fitting 6 as shown and its opposite end carries a coupling 15, to which is joined a hose 16 that leads to and connects with the liquid inlet 17 of a usual paint spraying gun 18. A valve 19 has one end thereof threaded into the fitting 14 and its opposite end carries a coupling 20, to which is joined a hose 21 leading to the outlet 22 of an air compressor 23. To an outlet 24 of said compressor is joined a hose 25 that leads to and connects with the air inlet 26 of gun 18.

50 When commencing operation with this appa-

ratus, the liquid-filled tank 2 and fitting 14 are fastened to each other, and the valve 19 is then opened. This directs the compressed air through the pipe 8 and forces it outwardly therefrom through the curved radial series of channels 13 of the device 11, which action causes the compressed air to emanate in a gyrating motion, which it in turn imparts to the liquid contents 3, and also in an upward and downward agitation of the liquid mass in the manner indicated by the arrows. As a consequence of the said motion and agitation of the liquid, its components become thoroughly admixed and the material is rendered uniform and efficient for proper spraying and application. After an interval of thus forcing the compressed air into the tank 2 the valve 19 is closed, and the enhanced air pressure within the tank then siphons the liquid through channels 13, upwardly through pipe 8, and through the hose 16 to the gun 18, with which the material may be sprayed and applied in the usual manner. During its feed the liquid is additionally agitated and further admixed to uniform consistency by its passage through the plurality of the curved radial channels 13 toward and into the pipe 8. A pressure gauge 27 connected to the tank 2 in its roof 4 serves to indicate at all times the extent of the air pressure existing within the tank.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described our invention, we claim:

A paint spraying apparatus having the combination of a closed receptacle for the painting liquid, a pipe leading from the upper part of the receptacle to the bottom of the receptacle, a paint spraying gun, a compressed air source, a pipe leading from said first pipe to said gun, a pipe leading from said first pipe to said source, and a valve in said third pipe, whereby opening said valve will admit compressed air to said receptacle through said first pipe to agitatingly intermix the painting liquid and closing said valve will cause the compressed air in the receptacle to feed the admixed painting liquid through said first and second pipes to said gun.

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