

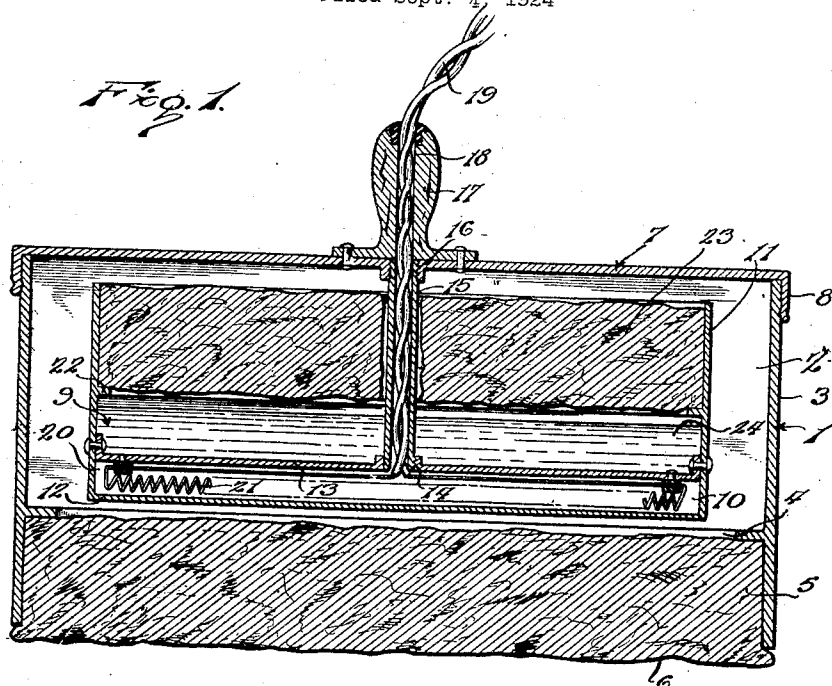
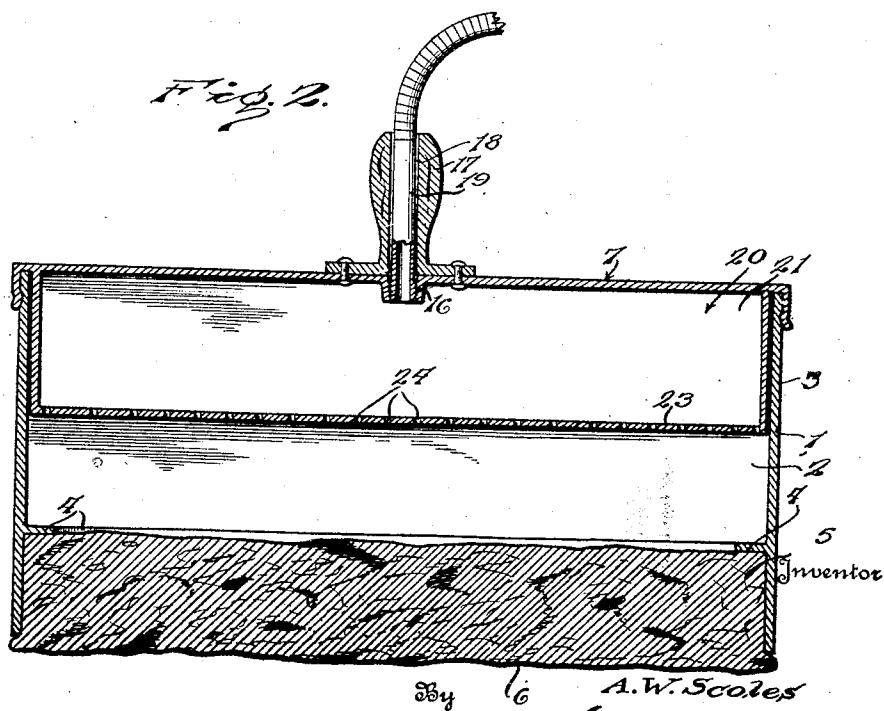
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APPARATUS FOR APPLYING LIQUID COMPOSITIONS

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By

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UNITED STATES PATENT OFFICE.

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APPARATUS FOR APPLYING LIQUID COMPOSITIONS.

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To all whom it may concern:

Be it known that I, ARTHUR W. SCOLES, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Apparatus for Applying Liquid Compositions, of which the following is a specification.

This invention relates to apparatus for applying paint and varnish removing compositions to wood or other surfaces, and the primary object of the invention is to provide an apparatus for the purpose stated in the use of which the composition may be applied in the most effective manner and the paint or varnish removed with greater facility and more thoroughly than has heretofore been possible by the ordinary methods of applying such compositions.

Another object of the invention is to provide an apparatus for the purpose stated in the use of which the composition may be applied to the surface to be treated in the form of a heated vapor, thereby insuring completion of the work in much less time than would ordinarily be required.

Another object of the invention is to provide an apparatus for the purpose stated so constructed that the same may be conveniently employed without likelihood of the hands of the operator of the same becoming soiled with the paint removing composition employed.

A further object of the invention is to provide an apparatus for the purpose stated embodying a casing, in the lower portion of which is arranged a filler of absorbent material presented at the under side of the said casing and adapted to be rubbed over or applied to the surface from which the paint or varnish is to be removed, and a heating unit which is supported by a cover for the casing, the invention contemplating the provision of two types of heating units, either of which may be substituted for the other, depending upon whether electricity is to be employed as the source of heat or steam is to be employed, so that the apparatus may be placed upon the market and either type of heating unit selected by the purchaser, according to the heat creating means available.

In the accompanying drawings:

Figure 1 is a longitudinal sectional view through the apparatus embodying the inven-

tion, the said apparatus, in this form, embodying an electric heating unit.

Figure 2 is a view similar to Figure 1, illustrating the same apparatus embodying a steam heating unit.

In both embodiments of the invention, the apparatus comprises a casing which is indicated in general by the numeral 1 and which is preferably of hollow rectangular form and includes side walls 2 and end walls 3, the casing being open at its top and bottom, with the exceptions hereinafter noted.

Arranged within the casing 1 above the open bottom thereof and projecting inwardly from the side and end walls of the casing is a flange which is indicated by the numeral 4, and packed in the open bottom portion of the casing is a filler 5 comprising a mass of sponge, waste, or any other absorbent material found suitable for the purpose. This filler engages against the under side of the flange 4 and is thus prevented from receding into the casing. The filler, at its lower side, projects a short distance below the lower margins of the side and end walls of the casing so as to provide a rubbing or applying surface which is indicated by the numeral 6.

The open top of the casing is closed, in each embodiment of the invention, by a cover 7 having a depending rim 8 to fit about the side and end walls of the casing, the cover being removable and, in one embodiment of the invention, as for example in Figure 1, supporting an electric heating unit and, in the other form of the invention, as shown in Figure 2, supporting a steam heating unit.

Referring now more particularly to Figure 1 of the drawings, the electric heating unit is indicated in general by the numeral 9 and comprises a substantially rectangular, hollow sheet metal casing including side walls 10 and end walls 11, the casing being open at its top and being provided with a bottom which is indicated by the numeral 12. Supported within the casing and spaced above the bottom 12 thereof, is a false bottom indicated by the numeral 13, and this bottom is provided, substantially centrally, with an opening surrounded by an upstanding annular flange 14 which is interiorly threaded to receive the lower end of a length of pipe indicated by the numeral 15. A similar opening 16 is formed in the cover 7

and accommodates the upper end of the said pipe. A handle 17 is riveted or otherwise secured upon the upper side of the cover 7 and has an axial bore 18 extending in alignment with the bore of the pipe 15, a conductor cord 19 being led downwardly through the bore of the handle and through the pipe and into the compartment provided between the side and end walls and bottom of the casing and the false bottom 13 therein, and which compartment is indicated by the numeral 20 and houses an electric resistance element 21 to which the wires of the conductor cord 19 are electrically connected.

A flange 22 is provided upon the inner sides of the end walls of the casing of the heating unit and extends about these walls and projects inwardly to sustain a filler 23 of the same material as the filler 5, which is packed into the upper open end portion of the said casing of the heating unit. This flange 22 is located somewhat above the false bottom 13 of the casing of the heating unit so that the underside of the filler 23 is located in a similarly spaced relation to the said false bottom, and between the filler and the false bottom there is, therefore, provided a chamber 24 which constitutes a reservoir for the liquid paint and varnish removing composition which is to be employed.

In the use of this embodiment of the invention, the chamber or reservoir 24 is supplied with a suitable quantity of the liquid composition, and the conductor cord 19 is connected to a source of electricity. The resistance element 21 will, in this manner, act to heat the liquid composition within the reservoir 24 and the steam from the composition will permeate and saturate the filler 23 and, passing through the filler, will reach and saturate the filler 5. If desired, the filler 5 may be previously saturated by immersing the apparatus to a suitable depth, in the said composition until the composition permeates the filler and enters the interior of the casing of the apparatus.

In that embodiment of the invention illustrated in Figure 2 of the drawings, the cover 7 for the casing of the apparatus is provided with the same handle member 17, opening 16, and the handle has the same bore 18 as in the previously described form, these parts being common to both forms of the invention. In this instance, however, one end of a steam supply pipe 19 is threaded into the opening 16 and the pipe is arranged to deliver steam into a steam chamber 20 including side walls 21 and end walls 22 which are united at their upper margins to the under side of the top or cover 7, the said chamber further including a bottom which is indicated by the numeral 23 and which is formed with a plurality of perfora-

tions 24. In this embodiment of the invention, steam is admitted into the chamber 20 through the pipe 19 and issues through the openings 24 to saturate and permeate the filler 5 and, at the same time, vaporize such volume of the liquid composition as may have entered the space between the under side of the bottom 23 of the steam chamber, at the time the apparatus is immersed in the composition.

In both forms of the invention, in utilizing the same, the apparatus is immersed in the liquid composition, the same then connected with the source of heat generation or supply and, after the liquid composition which saturates the fillers and which is retained within the apparatus, has become thoroughly heated and is being vaporized, the exposed applying surface of the filler 5 is applied to the surface from which paint or varnish is to be removed, the same remaining in contact with the surface until the paint or varnish has been softened and partially dissolved.

From the foregoing description it will be evident that by the mere substitution of one cover for another, heating units of different types may be made use of, according to the source of heat available to the purchaser or user of the apparatus.

It will be evident from the foregoing description of the invention that in the use of either form of the apparatus, the generated steam and the vapors generated from the paint removing liquid composition are concentrated at the applying surface 6 of the filler 5 of the apparatus where they will most effectually act upon the painted surface to soften and loosen the paint.

Having thus described the invention, what I claim is:

1. An apparatus for applying liquid compositions for the removal of paint, varnish, etc., comprising a casing open at its bottom, an absorptive filling within the casing having a portion projecting through and below the said open bottom of the casing and constituting a medium for absorbing and retaining a quantity of the liquid composition, and means within the casing for heating the interior thereof whereby to volatilize the liquid composition, whereby the vapors thereof will issue through the projecting portion of the filling and be brought into direct contact with the surface to be treated.

2. An apparatus for applying liquid compositions for the removal of paint, varnish, etc., comprising a casing open at its bottom, the interior of the casing constituting a reservoir for the liquid composition, an absorptive filling within the casing having a portion projecting through and below the said open bottom of the casing and constituting a medium for absorbing and retaining a quantity of the liquid composition, the said

filling closing the said bottom of the casing, and means within the casing above the filling for heating the interior of the casing and the liquid composition contained therein where-
5 by the vapors from the composition will issue through the projecting portion of the filling and be brought into direct contact with the surface to be treated.

10 3. An apparatus for applying liquid compositions for the removal of paint, varnish, etc., comprising a casing open at its bottom, a filler of absorptive material within the open bottom of the casing and having a portion projecting through and below the

said open bottom and constituting a medium 15 for absorbing and retaining a quantity of the liquid composition, a cover for the said casing, a steam chamber supported by the cover and depending into the casing and having a foraminous bottom presented to- 20 ward the said filler and spaced above the same, and a steam conducting pipe connected with an opening through the said cover and arranged to discharge steam into the said chamber. 25

In testimony whereof I affix my signature.

ARTHUR W. SCOLES. [L. S.]