## O. G. SOUDER & M. E. HAMILL. MOISTENER OR SOFTENER FOR WALL PAPER, PAINT, &c.

Application filed Dec. 13, 1900.)

(No Model.) 24 29 20-INVENTORS WITWESSES: Oliver Souder and Maggie E.Hamilt

## United States Patent Office.

OLIVER G. SOUDER, OF TIFFIN, AND MAGGIE E, HAMILL, OF FOSTORIA, OHIO.

## MOISTENER OR SOFTENER FOR WALL-PAPER, PAINT, &c.

SPECIFICATION forming part of Letters Patent No. 682,762, dated September 17, 1901.

Application filed December 13, 1900. Serial No. 39,807. (No model.)

To all whom it may concern:

Be it known that we, OLIVER G. SOUDER, residing at Tiffin, and MAGGIE E. HAMILL, residing at Fostoria, in the county of Seneca and State of Ohio, citizens of the United States, have invented or discovered a new and useful Improvement in Moisteners or Softeners for Wall-Paper, Paint, &c., of which the following is a full, clear, and exact description.

Our invention has for its object an improved construction of those vaporizers which are employed for moistening or softening coverings—such as paper, fabric, or paint—setoured by adhesive substances, so as to facilitate their removal by spraying vapor thereon to soak the same with moisture.

Our invention consists in certain novel features of construction of such vaporizers as 20 hereinafter described and claimed.

In order that our invention may be fully understood, we will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is a vertical axial section of our improved vaporizer for moistening or softening adhering coverings, such as paper, fabric, or paint. Fig. II is a horizontal section thereof on the line II II, Fig. I, looking in the direction of the arrows. Fig. III is a front view of the sprayer. Fig. IV is a vertical section of the same on the line IV IV, Fig. III.

1 is a cylindrical shell or casing having a circumferential series of air-inlet openings 2, 35 near the bottom thereof, to maintain combustion and adapted to be placed on a suitable table or other movable support, which is located in convenient position to a surface having an adhering covering of paper, fabric, or 40 paint which it is desired to moisten or soften, so as to loosen the covering and adhesive substance and render the same easily removable. This shell or casing is provided with a cover 3, formed with a pendent flange 4, 45 fitting within the top of the shell or casing, and with a horizontal flange 5, seating on the latter. The cover is further provided with a central opening 6 and a series of outlet-openings 7 for the discharge of the products of so combustion.

Located in a central position within the shell or casing is a vapor-burner 8 for hydrocarbon, having an oil-supply pipe 9, controlled by a valve 10 and connected with an oil-tank 11. If it is desired to utilize illuminating- 55 gas for heating purposes, we provide a supplemental gas-burner 12, which is supported on the vapor-burner and connected with a gaspipe 13.

14 represents radial supports for sustaining 60 the burners in addition to the supply-pipes. For the purpose of gaining access to the burners for lighting the vapor or gas we provide a side door 15, adjacent thereto.

Within the chamber provided by the shell 65 or casing are radial angular brackets 16, located above the burners.

17 is a closed water or liquid vessel or tank removably supported on the brackets over the burners and of such a diameter as to closely 70 fit in the central opening of the cover and leave a space to provide an annular combustion-chamber 18 around the vessel or tank, so that the sides of the vessel or tank may be heated as well as the bottom thereof. The 75 water or liquid is admitted through an inletopening 19 in the upper part or dome 20 of the vessel or tank, closed by a cap 21, and the vessel or tank is filled to a height on a line just above the cover to the shell or casing, 80 where we locate an overflow-indicating pipe 22, having a controlling-valve 23. The upper part or dome 20 provides a steam-chamber 24.

25 is an outlet-opening, also located in the 85 upper part or dome, through which the steam passes in the form of vapor through a vaporpipe 26, controlled by a valve 27.

28 is our improved sprayer, consisting of an outer rectangular member 29, provided 90 with a short vapor-tube 30 and an inner conical deflector or spreader 31, secured by yielding brackets 32 to the outer member, leaving a flaring passage 33, in which the vapor expands against the outer member, from which 95 it is thrown or sprayed onto the covering to be moistened or softened for removal, to accomplish which the hood or sprayer's outer edges are in contact with the wall or object to be treated, thus confining and condensing 100

the vapors until the object is thoroughly saturated in order to perform the functions for which the invention is intended. The removal of the covering may be accomplished by peeling it off by hand or by a scraper. The vapor-tube is connected with the vapor-pipe by hose-pipe 34, of desired length to enable the sprayer to be manipulated at the desired distance from the vaporizer.

ber, whereby the sprayer may be held in desired position with relation to the covering to

be removed.

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Having thus described our invention, the following is what we claim as new therein and

desire to secure by Letters Patent:

1. The combination with a shell or casing, of a heating device arranged therein, radial supports for said heating device, pipes for the supply of oil or gas to said heating device supported in the shell at right angles to said radial supports, a closed tank or vessel supported within the shell above the heating device, a cover for the upper end of the shell above the shell above

bly connected with said tank or vessel, substantially as described.

2. A sprayer for a device of the character described, consisting of an outer rectangular member having a vapor-tube, an inner conical deflector or sprayer confined within the outer member, and yielding brackets within the outer member and securing the same to said deflector, substantially as described.

3. A sprayer for a device of the character 35 described, consisting of an outer rectangular member having a vapor-tube, an inner conical deflector or sprayer confined within the outer member, yielding brackets within the outer member and securing the same to said 40 deflector, and a handle upon the outer surface of the outer member, substantially as described.

In testimony whereof we have hereunto set our hands this 19th day of November, 1900. 45

OLIVER G. SOUDER. MAGGIE E. HAMILL.

Witnesses:

A. S. HAMILL, E. C. RUMELS.