W. W. VINCENT.
HEATING DEVICE FOR BEDSTEAD TRIMMINGS.
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3 SHEETS-SHEET 1.

Fig. 1.

Witnesses,

Sam Mann
Walter M. Fuller

Inventor,

William H. Vincent

By Affidavit of Witness

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.
To all whom it may concern:

Be it known that I, WILLIAM WRIGHT VINCENT, a citizen of the United States, residing at Kenosha, in the county of Kenosha and State of Wisconsin, have invented certain new and useful Improvements in Heating Devices for Bedstead-Trimnings, of which the following is a specification.

This invention concerns simple, inexpensive, and conveniently-actuated devices for heating and manipulating small parts to be lacquered or otherwise coated while in a heated condition, such as, for example, as the various trimmings, mounts, knobs, and the like used on brass bedsteads. Inasmuch as the heating period is longer than the time consumed in lacquering a single part, I have found it convenient and desirable to arrange such devices in banks or series whereby the knobs or the like can be coated in succession, the others being heated while the particular one being coated is temporarily projected out of the oven or other heating compartment in position for the ready application of the lacquer. After being coated each knob or trimming is removed from its support and replaced by another which will be subjected to the heat during the coating of the remaining knobs of the series.

A preferred and desirable embodiment of this invention is set forth in the drawings accompanying this specification and forming a part thereof, like reference characters referring to the same parts throughout the views.

In these drawings—Figure 1 is an end elevation of the appliance; certain parts being broken away to more clearly illustrate the details of construction; Fig. 2 is a vertical section on line 2—2 of Fig. 1, the springs and treads being illustrated unsectioned; and Fig. 3 is a face view of the heating appliance and the pipes leading thereto, showing one of the sliding shafts bearing a bedstead trimming, another of the shafts with the holder in place, and the remaining shafts with the holders removed.

On a suitably-supported table-top or bench and overhanging the table or bench, as indicated in Fig. 1, I mount a heating oven or hollow casting having a flat base portion secured in any suitable manner to the tabletop. This casting is equipped with a plurality of thin inlet horizontal tubes each having a front open mouth, the rear portion of each tube being closed by a centrally-perforated closure or metallic block.

From a suitable gas supply pipe a plurality of branches, equal in number to the compartments or tubes and each supplied with a controlling valve, conduct the gas from such main pipe to the burners, the top ends of which project through suitable apertures in the bottom of the casting into the interior thereof. In order to permit access of the external air to the interior of such oven or heating appliance to carry on the gas combustion, the base thereof is equipped with a number of holes, the products of combustion escaping at the top through the apertures or holes. It will, therefore, be apparent that the gas burning within the oven heats the tubes or compartments substantially uniformly the flames or products of combustion not entering such compartments, which are adapted to accommodate the knobs or trimmings during the heating operation.

In alignment with each tube or compartment I provide a pair of bearings in which a shaft is adapted to slide and rotate, the front portion of such shaft projecting through the hole of the plug or closure, as is clearly indicated in Fig. 1. In the end of each of these shafts is fitted a conical mount or trimming holder adapted to extend partially within such hollow mount or trimming and hold the same thereon by frictional contact. Each sliding shaft has keyed thereto a grooved pulley rotated by a belt, the key-way of the shaft being of considerable length and permitting the shaft to slide in such pulley, the latter being maintained against longitudinal movement with the shaft by a sleeve interposed between the same and one of the bearings. It should, therefore, be apparent to those skilled in this art that the belts and pulleys rotate the shafts and that the latter may be slid lengthwise at the same time.

Beneath each oven and shaft I mount a right-angle braced treader or foot-operated bell-crank fulcrumed on the floor and pivotally connected at its upper end to the shaft, a coil contractile spring being connected to the brace of the treader at 33 and to a depending iron bracket at 35, tending to rock the treader rearwardly.

UNITED STATES PATENT OFFICE.

WILLIAM WRIGHT VINCENT, OF KENOSHA, WISCONSIN, ASSIGNEE TO THE SIMMONS MANUFACTURING COMPANY, OF KENOSHA, WISCONSIN, A CORPORATION OF WISCONSIN.

HEATING DEVICE FOR BEDSTEAD-TRIMMINGS.


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on its fulcrum and slide the shaft in a corresponding direction to normally maintain the trimming 24 within the oven or compartment 13. As is clearly indicated in Fig. 1, the upper portions of these bell-crank treadles extend through an aperture in the table-top.

It being assumed that each of the supports or holders 23 has been supplied with a knob or mount 24, the operator, by pressure of his foot upon the first treadle 29, rocks the latter forwardly on its fulcrum in opposition to the action of spring 32 and slides the first shaft 22 forwardly, bringing the knob or trimming carried thereby out of the compartment or oven into a convenient position for the application of the lacquer, which is brushed on during such heated condition of the trimming or mount and during its rotation, it being understood that such knob or trimming is constantly rotated. Such rotation when the knob is in the oven assists in the uniform heating of the same, and when the knob or trimming is projected from the oven permits the operator to readily coat the same. The first trimming or knob having been properly lacquered, it is removed and replaced by another, the workman then lifting his foot from the treadle so that the spring 32 by its contraction shifts the shaft rearwardly, bringing the trimming or mount into the oven for the application of the heat. The workman then projects the second knob or mount in like manner, coats the same, and replaces it with another. The number of compartments and pieces to be lacquered and the heat applied thereto are chosen so that when the last trimming has been coated the mount or knob in the first compartment will have been heated sufficiently to be ready for the application of its protective coating.

Inasmuch as a contrivance of this character is susceptible of considerable modification with respect to its structural features without departure from the heart of this invention, it is to be understood that such invention is not limited and restricted to the exact device shown and described.

I claim:

1. In a machine for heating bedstead trimmings, the combination with a heating oven, of a plurality of heating tubes substantially closed at one end extending through said oven, a slidable mounted rotating shaft extending through the closed end of each tube and carrying a holder, means for independently rotating said shafts, and means for independently sliding said shafts to move the corresponding holders into and out of the 60 open ends of the tubes.

2. In a machine for heating bedstead trimmings, the combination with a heating oven, of a plurality of heating devices in said oven arranged side by side and substantially closed at one end, a longitudinally slidable rotary shaft extending through the closed end of each tube, a holder on the inner end of each shaft, means for rotating said shafts, and means for independently shifting the 70 shafts to carry the holders into or out of the open end of the tubes.

3. In a device of the character described, the combination with a heating oven, of a plurality of heating tubes extending therethrough and spaced away from the side walls of said oven, means for supplying heat to said oven, a plurality of slidable mounted rotary shafts extending into one end of the tubes, a holder for that end of each shaft 80 within the tube, means for rotating said shafts and means for shifting said shafts to carry the holders out of the opposite ends of the tubes.

4. In a device of the character described, the combination with a gas oven, of a heating tube extending therethrough open at one end but sealed against communication with the interior of the oven, a slidable shaft extending through a suitable aperture in the closed end of the tube adapted to carry a piece to be heated, said piece being coated, and means for sliding said shaft to carry said piece into said heating tube and out through the open end of the tube.

5. In a device of the character described, the combination with a heating oven, of a plurality of heating devices in said oven open at one end but sealed against communication with said oven, a slidable mounted 100 rotary shaft extending through an aperture in the closed end of each tube and adapted to hold the piece to be heated, means for rotating said shafts, and a plurality of independently movable treadle mechanism for longitudinally shifting said shafts separately to carry the pieces to be heated into the tubes and to shift them out of the open ends of the tubes when heated to be coated.

WILLIAM WRIGHT VINCENT.

Witnesses:

J. H. CANTWELL, JR.,

PHILIP FREDERICK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."