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C. F. ALLGAIER

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BURNING-IN TOOL

Filed July 22, 1929

Fig. 1.

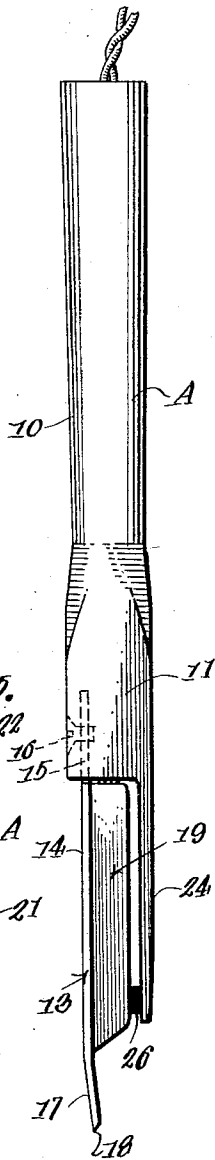


Fig. 3.

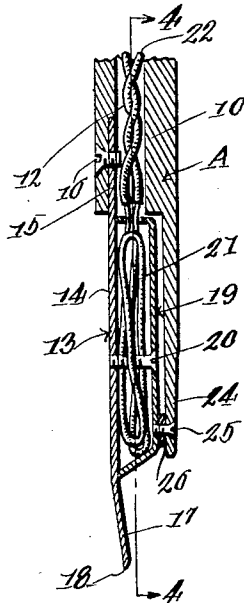


Fig. 2.

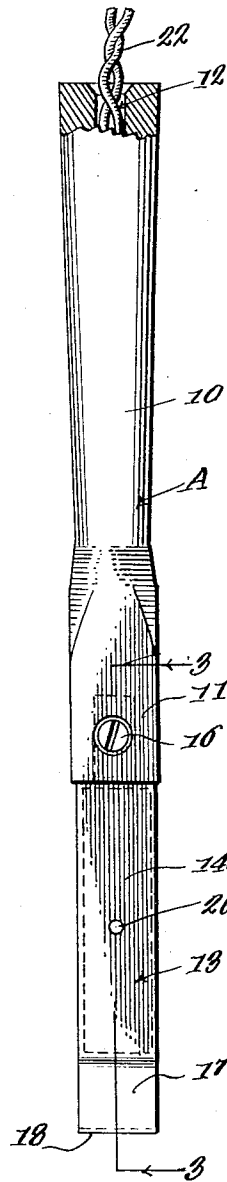


Fig. 5.

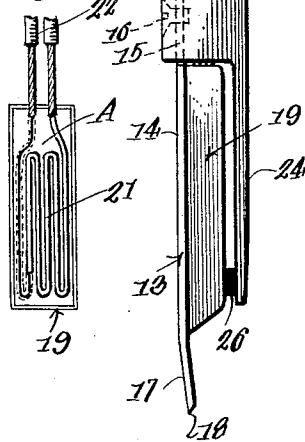
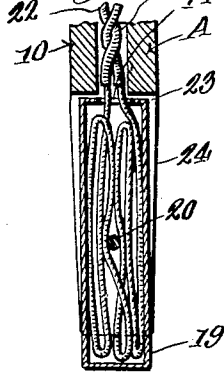


Fig. 4.



INVENTOR.
CARL F. ALLGAIER

BY
Irving L. McArthur
ATTORNEYS.

UNITED STATES PATENT OFFICE

CARL F. ALLGAIER, OF JOLIET, ILLINOIS

BURNING-IN TOOL

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This invention appertains to tools utilized for finishing furniture or repairing the finish thereon and the primary object of my invention is to provide an improved electric tool for melting and applying hard varnish to any woodwork, such as radio cabinets, pianos, furniture, etc.

Another salient object of my invention is to provide an improved electric finish repairing tool for furniture embodying a manipulating handle detachably supporting the burning-in implement, the implement having directly associated therewith a shell which receives the resistance coil, the manipulating handle having a bore through which the feed wire for the coil is extended.

Another important object of my invention is the provision of novel means for mounting the implement and shell on the forward end of the handle and a novel extension on the handle for overlying the shell for guarding the thumb of the user of the tool from the heat from the shell and to relieve undue stress on the tang of the implement incident to the use of the tool.

A further object of my invention is the provision of a novel implement used in connection with the burning-in tool, the implement embodying a flat body for receiving the shell for the resistance coil, a tang for connection with the handle, and a smooth offset extension disposed beyond the shell for applying the hard varnish to the surface being repaired or refinished.

A still further object of my invention is to provide an improved tool of the above character, which will be durable and efficient in use, one that will be simple and easy to manufacture, and one which can be placed upon the market at a small cost.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawing, in which drawing:

Figure 1 is a side elevation of my improved tool;

Figure 2 is a plan view of the same showing the inner end of the handle broken away

and in section to illustrate the way or bore therethrough for receiving the electric feed wires;

Figure 3 is a fragmentary longitudinal section through the improved tool taken on the 3—3 of Figure 2;

Figure 4 is a section taken at right angles to Figure 3 on the line 4—4 of Figure 3 looking in the direction of the arrows, and

Figure 5 is a diagrammatic view showing the resistance coil disposed in the shell.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter A generally indicates my improved burning-in tool which comprises a manipulating handle 10 preferably formed of wood or other non-heat-conducting material, and the handle at its forward end is provided with a shank 11, both the handle and shank being provided with a longitudinally extending bore or way 12, for a purpose which will be later described. The forward end of the shank 10 detachably supports the burning-in blade or implement 13, which constitutes an important part of my invention, and the burning-in blade or implement 13 includes a flat longitudinally extending body portion 14 having the attaching tang 15 on its inner end which is received within the forward end of the bore 12. A suitable screw 16 can be employed for extending through the shank 11 and the tang to hold the implement in position. The extreme forward end of the body 14 is provided with an angular extension 17, the free edge of which can be sharpened as at 18.

The body portion 14 of the blade or implement 13 receives a hollow shell 19 which can be secured to the blade by the use of a suitable fastening element, such as a screw 20. This shell 19 has its outer face completely open and this portion of the shell rests against the body portion of the blade so that the shell and blade form a complete housing for the resistance coil 21 which constitutes the heating element.

The electric feed and return wires 22 are extended through the way 12 and into the shell 19, the same being provided with a suit-

able opening 23 in its rear wall for this purpose. The resistance coil has the various convolutions thereof insulated from one another and this insulation is placed about the coil itself and the terminals of the coil are preferably soldered directly to the terminals of the feed and return wires 22. The feed and return wires can be connected to the conventional plug (not shown) for connection with the usual floor socket or outlet.

In order to further enhance the usefulness of the tool, the shank 11 is provided with an integral flat extension 24, the outer face of which extends flush with the top or outer face of the shank and this extension 24 overlies the shell 19 and forms a guard therefor so as to prevent the burning of the thumb of the hand of the user during the manipulation of the tool and this extension 24 can form a thumb rest if desired. Further, this extension 24 is utilized for taking stress off of the tang 15 of the blade or implement 13 and the shell 19 adjacent to the forward end thereof is connected to the forward end of the extension 24 by means of a suitable fastening element such as a screw 25. A spacing washer 26 can be placed on the screw between the shell 19 and the extension 24, and this spacer can be formed of heat insulating material of a non-charring character.

In use of the improved tool, the circuit is closed through the heating elements or resistance coil 21, in any desired way, and the lower inclined face 17 of the blade or implement is placed against the stick of varnish so as to melt the same. After the varnish has melted from the stick onto the blade, the melted varnish and the inclined end of the blade are placed against the surface to be varnished or repaired and the flat end of the tool is used for applying the varnish smoothly in place, after which the varnish is polished in the ordinary way.

From the foregoing description it can be seen that I have provided an improved electric finish repairing tool for furniture, which will be easy to manipulate and which will expedite repairing of the finish of furniture and eliminate the difficulty heretofore experienced in this line.

Changes in details may be made without departing from the spirit or the scope of this invention, but:

What I claim as new is:

1. A tool for repairing and finishing varnished surfaces comprising a manipulating handle, a varnish and furniture engaging implement detachably connected with the handle, a shell secured to one face of the implement, a heating coil in said shell, feed and return wires extending into the shell and connected with the heating coil, an inclined extension formed on the implement arranged beyond the shell, and a guard plate formed on said handle and overlying said shell.

2. A tool for repairing and finishing varnished surfaces comprising a manipulating handle, a varnish and furniture engaging implement detachably connected with the handle, a shell secured to one face of the implement, a heating coil in said shell, feed and return wires extending into the shell and connected with the heating coil, an inclined extension formed on the implement arranged beyond the shell, a guard plate formed on said handle and overlying said shell, and means connecting the forward end of the shell with the guard plate.

In testimony whereof I affix my signature.
CARL F. ALLGAIER.