F. M. ANDREWS.

ELECTRIC SEALING WAX APPLYING DEVICE.

APPLICATION FILED MAR. 10, 1915.

1,219,903. Patented Mar. 20, 1917.

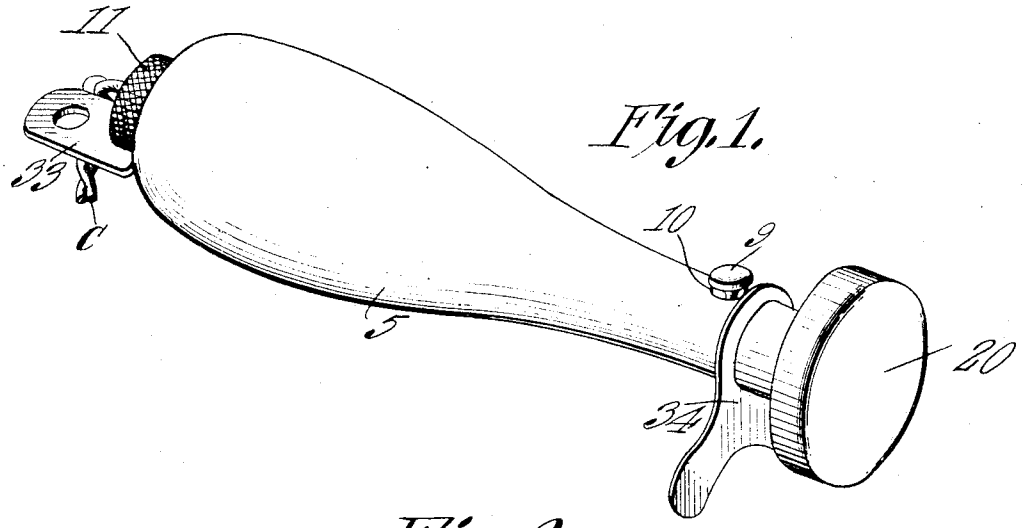


Fig. 1.

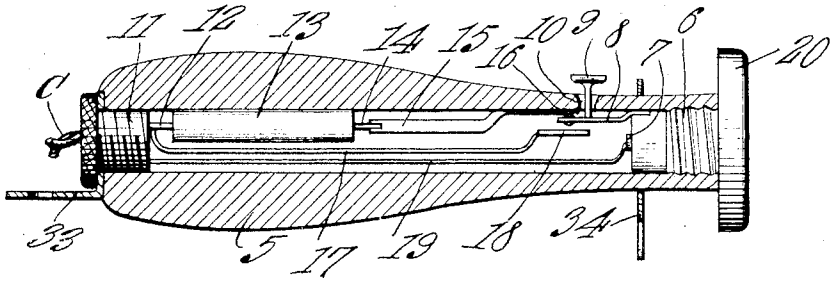


Fig. 2.

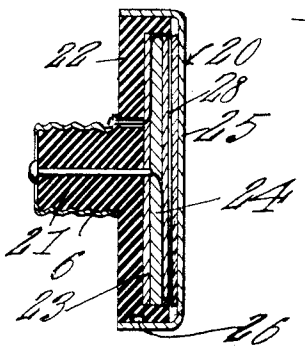


Fig. 3.

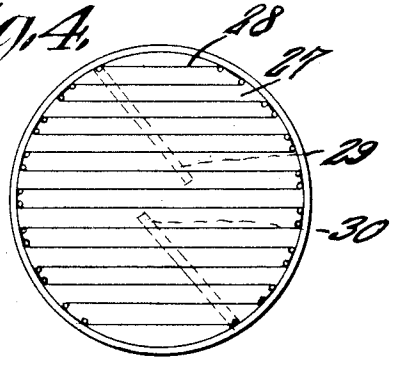


Fig. 4.

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Witnesses
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UNITED STATES PATENT OFFICE.

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ELECTRIC SEALING-WAX-APPLYING DEVICE.

1,219,903. Specification of Letters Patent. Patented Mar. 20, 1917.

Application filed March 10, 1915. Serial No. 13,366.

To all whom it may concern:

Be it known that I, FAY M. ANDREWS, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Electric Sealing-Wax-Applying Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an electric sealing wax applying device, one object of the invention being the provision of a hand tool that can be rapidly heated by electric current to heat a wax melting and applying head against which may be held the wax stick during the melting thereof and the dripping of the melted wax upon the article to be sealed, such head being further adapted to be applied to the spread wax upon the article to smooth it over and thus economically use the wax.

A further object of the invention is the provision of a means whereby a resistance is placed in circuit with the heating unit, and is instantly cut out and the unit connected directly in the circuit, so that the applying head under normal conditions is slightly heated so that when the full current is affecting the heating unit the applying head is brought to a wax melting temperature in the shortest possible time, and is not maintained at such heat when not in use.

A still further object of this invention is the provision of a handy device which can be quickly attached to a lighting or power circuit, or where desired to a low voltage battery system, the tool being provided with a hand grip which readily presents a push button to cut in and out the resistance, the heating unit carrying member and applying head being readily detached also.

With the foregoing and other objects in view and which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 is a perspective view of the complete device.

Fig. 2 is a longitudinal section through the device.

Fig. 3 is an enlarged sectional view through the applying head, its support and the heating unit.

Fig. 4 is a plan view of the heating unit.

Referring to the drawings, the numeral 5 designates a hollow or tubular handle, which is made in any desired shape to conveniently accommodate itself to the hand, the same being provided with the metal shell or socket 6, at one end. The central connection 7 is provided with the shell while the resilient contact plate 8 is connected to the shell, the connection 7 being insulated therefrom so that the two provide the current supplying members of the device. The button 9 is carried by the plate 8 and projects through the opening 10 to be readily accessible to the thumb of the operator's hand while grasping the handle. The wire guiding plug 11 fits in the opposite end of the handle and carries the rigid terminal 12, which engages one terminal of the resistance 13, whose other terminal 14 engages the free end of the terminal plate 15, which is provided with the contact 16 in the path to be normally engaged by the plate 8, so that under normal conditions the resistance 13 is always in circuit. A branch conductor 17 is connected to the terminal 12 and to the plate 18, which is in the path to be engaged by the plate 8 when the same is depressed by the push button 9, thus cutting out the resistance 13 and connecting the plate 8 directly to the terminal 12. Another conductor 19 is led through the handle 5, and is connected to the connection 7, and thus forms the other conductor for the current. The conductors C, are to be connected to a plug or other electrical connecting medium (not shown) so that the current will be supplied through the usual socket connection to flow at all times while the device is ready for use.

The applying head or member 20, is of peculiar construction, being provided with the plug 21, which is made in the form of a small lamp plug of the usual type, so that when the same is screwed in the shell 6, the proper electrical connection will be made. A porcelain or other insulating disk 22 having its outer face socketed and lined with heat and electrical insulating material 23 is provided, such material 23 being preferably

asbestos or mica, as may be desirable. The heating unit 24, is laid thereupon and its terminals 29 and 30 are connected respectively to the connection for engagement with the connection 7 and with the shell of the plug, while the applying head is made in the form of a cap or plate 25, whose portion at the junction of the body and rim is rounded to permit of the melted wax to flow freely thereoff and to also permit the outer face to be wiped or rubbed over the wax to smooth the wax upon the article. A bayonet connection 26 is provided between the disk 22 and the cap 25, so that the same may be readily attached and detached for insertion of and removal of the heating unit, and also for the renewal thereof in case of a burnout.

In operating the present device, the handle is gripped in one hand, the current to the device having been previously turned on, and with the thumb the button 9 is pressed to cut out the resistance 13 and thus direct the full current to the heating unit, which as shown in Fig. 4, consists of a disk 27 of mica with the conductor 28 wound zig-zag thereon, and held in place by the pins *a*. Mica sheets 31 and 32 are disposed upon both sides of the wire 28 and its supporting disk 27, and thus prevent any short-circuiting when the cap 25 is tight in place and close upon the unit. By this means the heat is distributed directly to the cap 25 so that it is properly heated for melting the wax which is held in the other hand and rubbed over the outer face of the cap 25, which is slightly inclined to direct the flow of the melted wax therefrom and onto the article to receive the wax. When the wax has thus been applied, to smooth it over the surface, the cap 25 is manipulated to rest upon the same and be moved back and forth thereover to thus soften and smooth out the wax, and make a small amount of the wax suffice.

To provide means for suspending the present device the apertured plate 33 is carried at one end of the handle while mounted upon the body thereof adjacent to the apply-head is a two pronged plate 34, which prevents the device from rolling upon a flat surface when not in use, and also holds the heated applying head away from the surfaces both when suspended from the plate 33 and when resting on a flat surface.

What I claim, as new is:—

1. An electric device for applying sealing wax, including a tubular handle having a socket connection in one end thereof, an insulation member having a concentric plug upon one face and a recess upon the opposite face, a metal covering for the plug, a concentric terminal mounted in the plug, a heating unit comprising a support of insulating material and a resistance wire upon such material, said unit filling the recess of the insulation member and having the terminals of the wire thereof connected respectively to the concentric terminal and to the metal covering of the plug, and a snap cover fitting over the recessed end of the insulation member and against the heating unit, the outer face and the edge of the cover forming a wax melting and applying surface.

2. An electric sealing wax applying device, including a hollow handle, a socket in one end of the handle, a resilient button actuated contact plate mounted in the handle and connected to one terminal of the socket, a resistance mounted in the handle and having one terminal normally in contact with the contact plate, a conductor bridged around the resistance, a contact connected thereto and in the path to engage the resilient contact plate when the button is depressed, a socketed member having a plug connection for engagement with the socket, a heating unit mounted therein and electrically connected with the plug connection, the outer face of the unit being beyond the outer face of the socketed member, and a wax melting and applying cap fitting over the socketed member and having its disk portion in contact with the heating unit.

In testimony whereof I affix my signature in presence of two witnesses.

FAY M. ANDREWS.

Witnesses:
DAVID P. MOORE,
R. C. M. HASTINGS.