Dec. 20, 1949 W. M. COLLINS 2,491,716

ELECTRICALLY HEATED PAINT SCRAPER

Original Filed Jan. 1, 1942

Fig. 1.

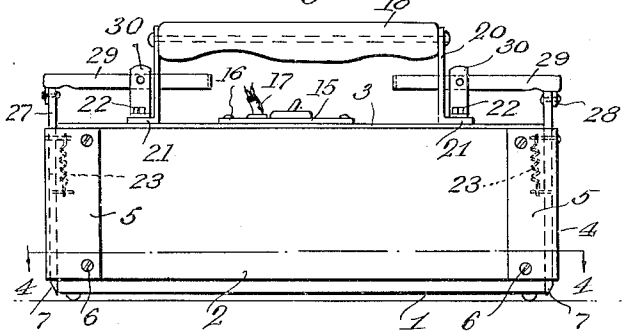


Fig. 5

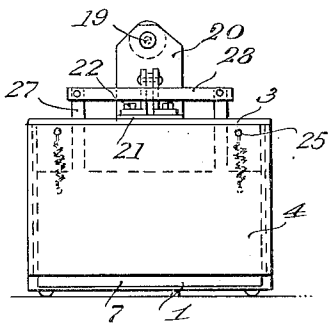


Fig. 2.

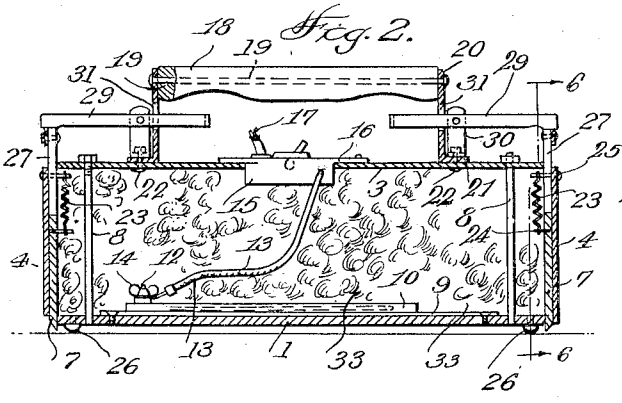


Fig. 6.

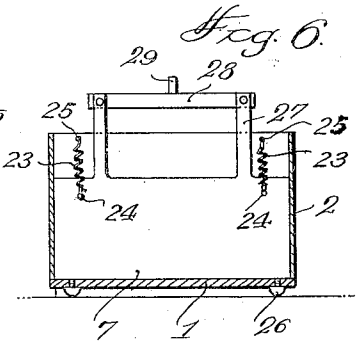


Fig. 3.

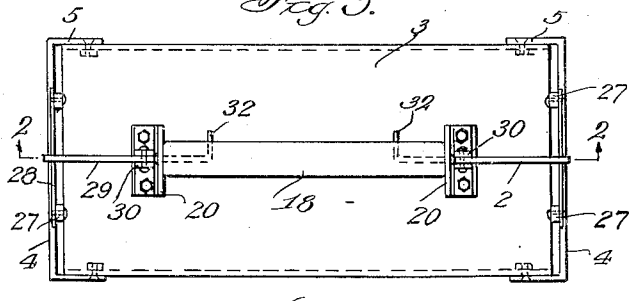


Fig. 7

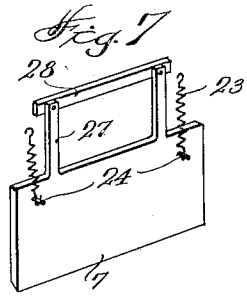
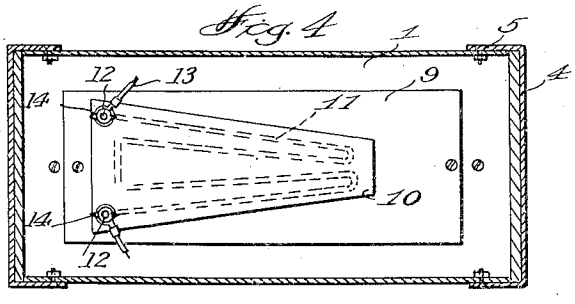


Fig. 4



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## ELECTRICALLY HEATED PAINT SCRAPER

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Substituted for application Serial No. 641,115, January 14, 1946, which was substituted for my application Serial No. 424,210, January 1, 1942. This application July 19, 1948, Serial No. 39,532

4 Claims. (Cl. 219—29)

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This invention relates to paint removing devices, and its general object is to provide a device which makes it possible to remove paint, varnish and the like from painted surfaces in an easy and expeditious manner, in that the device includes heating means for softening the paint, and means for scraping the softened paint from the surface.

A further object is to provide a device of the character set forth, that is light in weight, can be easily operated, is simple in construction, inexpensive to manufacture, and extremely efficient in use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

This application is a substitute for my abandoned application No. 641,115, filed January 14, 1946, which was a substitute for my abandoned application No. 424,210, filed January 1, 1942.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a side elevation of the device which forms the subject matter of the present invention.

Figure 2 is a sectional view taken approximately on line 2—2 of Figure 3, looking in the direction of the arrows.

Figure 3 is a top plan view of the device.

Figure 4 is a sectional view taken approximately on line 4—4 of Figure 1, looking in the direction of the arrows.

Figure 5 is an end view of the device.

Figure 6 is a sectional view taken approximately on line 6—6 of Figure 2, looking in the direction of the arrows.

Figure 7 is a detail view illustrating one of the scraping blades, and the associated elements thereof, including the springs, for holding the blade in a normal raised position.

Referring to the drawings in detail, it will be noted that my device includes a hollow elongated rectangular casing like body made up of a base plate 1, side walls 2 that rest upon the upper faces of the base plate along the longitudinal edges thereof, a top wall 3 and end walls 4, the latter being formed with inwardly directed side flanges 5 along the height thereof, and the flanges are secured to the side walls by kerfed bolt and nut connections 6 for disposing the end walls in

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spaced relation to the ends of the top and side walls and the base plate, to provide guides for vertical movable scraping blades 7, which will be later described.

The top wall rests upon the upper edges of the side walls and is removably secured thereto by a pair of upright rods 8 that are fixed to and rise from the base plate centrally of the side edges thereof and adjacent its ends, the rods having threaded upper ends that extend through openings in the top wall, and nuts are threaded on the upper ends of the rods in bearing relation with the top wall, as shown in Figure 2. By that construction, it will be seen that the base plate and top wall are removably fixed to the side walls, so that ready access may be had to the interior of the body.

Resting on and secured to the base plate along the length thereof, by screws or the like is a rectangular heating plate 9 having fixed thereto an elongated heating unit that includes a flat housing 10 of insulating material, tapered toward one end and enclosing a heating coil 11 of the usual resistance type, the ends of the coil being connected to binding posts 12 at the ends of the housing 10 and one of the ends of conductors 13 are likewise connected to the posts by wing nuts 14. The opposite ends of the conductors are connected to a switch, preferably of the toggle type, shown, and which includes an elongated casing set within a slot along the length of the top wall, the casing being formed with attaching ears 16 at the ends thereof and the ears are fixed to the top wall by screws or the like. Conductors 17 are likewise connected to the switch for connecting the device in circuit with a suitable source of electric current, and for that purpose, the conductors 17 preferably have a conventional plug, not shown, connected thereto.

The device is provided with a handle that includes a gripping member 18 supported along the longitudinal center of the top wall directly above the switch, so that the switch can be conveniently operated by the hand of the user gripping said member 18, and the latter is mounted on a rod 19 that is secured to and bridges the upper ends of the upright portions of a pair of spaced supporting brackets 20 that have their lower end portions bent outwardly toward the ends of the top wall to provide ears 21 fixed to the top wall, preferably by bolt and nut connections 22.

The device in the form shown includes a pair of scraping blades 7, one at each end of the body and the blades are slidably mounted in the guides

spaces previously referred to. The blades are of rectangular formation, as best shown in Figure 7, and are normally held with their lower beveled edges disposed substantially flush with the base plate, as shown in Figure 1, by vertically arranged coil springs 23, there being a pair of coil springs for each plate, and which have their lower ends connected to pins 24 secured to the blades adjacent the side edges thereof, and the upper ends of the springs are connected to pins 25 secured to the end walls. The pins extend inwardly from the blades and end walls, for disposing the springs within the body, as shown in Figure 2.

The base plate has rounded headed screw elements 26 secured thereto adjacent its corners, and the heads of the elements 26 provide gliders for elevating the base plate from the surface being treated, as well as facilitates free movement of the device along said surface.

The blades are manually movable against the action of the springs 23 for disposing the beveled edges thereof at any desired position below the base plate, as will be apparent from Figure 2, and for that purpose, each blade has a pair of uprights 27 secured to and rising therefrom. Secured to and bridging the upper ends of the uprights is a bar 28 that has the outer end of a lever 29 resting thereon. A lever is of course provided for each blade, and the levers are pivotally connected to and between a pair of brackets 30 that are secured to the ears 21 by the bolt and nut connections 22. The levers extend through slots 31 arranged vertically in the upright portions of the brackets 20 and the inner end portions of the levers are bent laterally to provide handles 32. By that arrangement of the levers, it will be seen that the user of the device can conveniently manipulate the same by the fingers of the same hand used in gripping the member 18.

In order to prevent the handle and levers from becoming unduly heated, the body is filled with suitable heat insulating material 33, such as fiber asbestos or the like.

From the above description and disclosure in the drawing, it will be obvious that in the use of my device, it is applied to a painted surface and that the heat from the base plate will soften the paint, thence the blades are lowered and held against said surface and the device is reciprocated or otherwise moved for scraping the paint therefrom.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:

1. A paint removing device comprising a body including a base plate, means within the body for heating the base plate, a handle secured to and rising from the body for moving the device relative to a surface to be treated, movably mounted scraping blades carried by the body, springs connected to the blades and body respectively for normally holding the blades out of scraping position, upright means secured to the blades and extending above the body, and manually operable levers pivotally connected to the body and engaged with the upright means for securing and holding the blades to and in scraping position.



2. A paint removing device comprising a body including a base plate, electrical heating means within the body and secured to the base plate for heating the latter, a handle including slotted brackets secured to and rising from the body in spaced relation to each other, gripping means secured to and extending between the brackets, movably mounted scraping blades carried by the body and means anchored within the body for normally holding the blades out of scraping position, a pair of spaced uprights secured to each blade, means secured to and bridging the upper ends of each pair of uprights, manually operable handled levers engaged with the bridging means for moving and holding the blades to and in scraping position, and said levers extending through the slots of the brackets for disposal adjacent to and below the gripping means.

3. A paint removing device comprising an elongated rectangular hollow body including a base plate and top, side and end walls, said end walls being fixed to the side walls and being spaced from the ends thereof, the base plate and the top wall to provide guides, means within the body for heating the base plate, means secured to the base plate adjacent the corners thereof to elevate the same above a surface to be treated, a handle secured to and rising from the top wall, scraping blades mounted for slidable movement in and through the guides and having beveled lower edges, springs anchored within the body and connected to the blades for normally holding the latter with the beveled edges above the bottom face of the base plate, and manually operable means for moving the blades against the action of the springs for disposing and holding the blades with the beveled edges thereof below the base plate.

4. A paint removing device comprising a body including a base plate and top, side and end walls, said end walls being spaced from the ends of the base plate and the top and side walls, a heating plate fixed to the upper face of the base plate, an electric heating unit fixed to the heating plate, a switch mounted on the top wall and being in circuit with the heating unit, a handle secured to and rising from the top wall and overlying the switch, scraping blades mounted for slidable movement in and through the space intermediate of the end walls and the ends of the base plate, top and side walls and having beveled lower edges, springs connected to the blades for normally holding the latter with the beveled edges above the bottom face of the base plate, manually operable means for moving the blades against the action of the springs for moving and holding the blades with the beveled edges thereof below the base plate, and heat insulating material filling said body to protect the handle and manually operable means from becoming unduly heated.

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