

Sept. 23, 1941.

F. PREISSER

2,256,648

ELECTRICALLY HEATED PAINT AND PAPER SCRAPER

Filed April 11, 1939

Fig. 1.

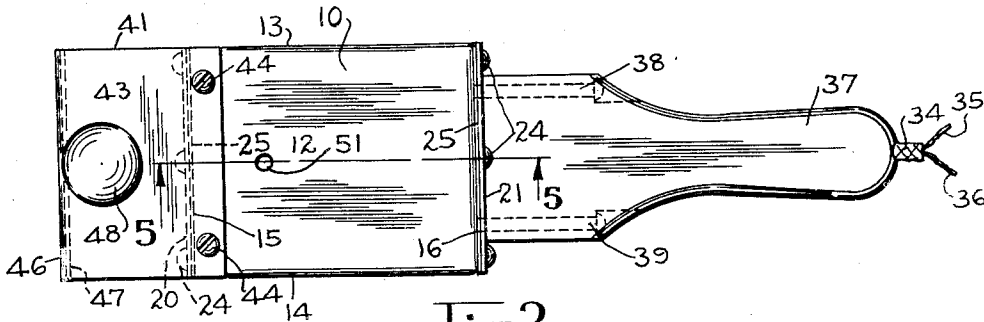


Fig. 2.

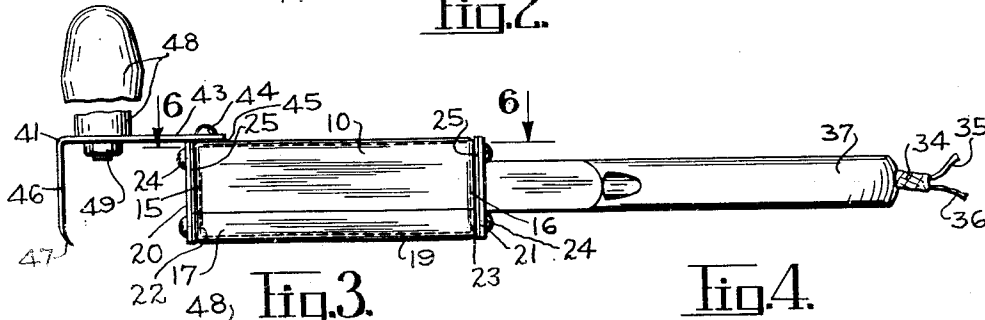


Fig. 3.

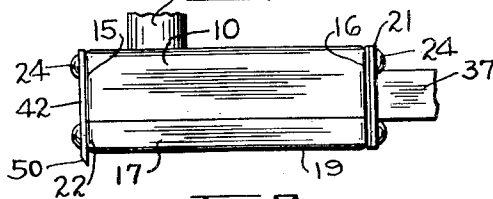


Fig. 4.

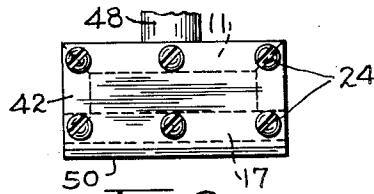


Fig. 5.

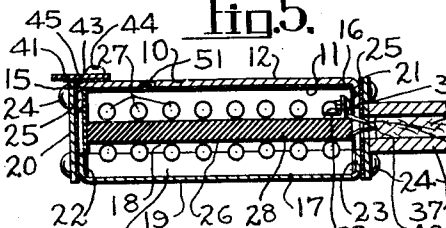


Fig. 6.

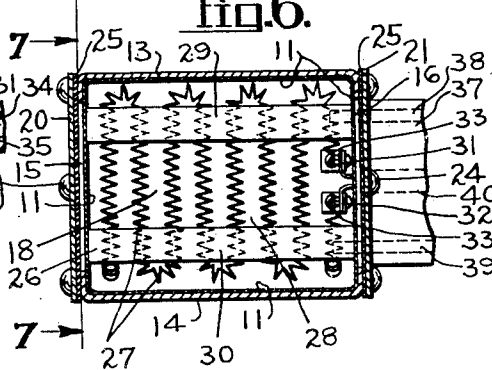
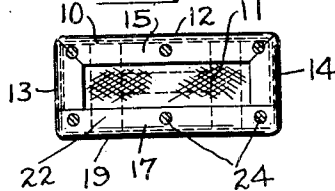


Fig. 7.



INVENTOR
Frederick Preisser.

BY
H. G. Manning
ATTORNEY

UNITED STATES PATENT OFFICE

2,256,648

ELECTRICALLY HEATED PAINT AND PAPER
SCRAPER

Frederick Preisser, Plainville, Conn.

Application April 11, 1939, Serial No. 267,235

3 Claims. (Cl. 219—29)

This invention relates to scrapers, and more particularly to an electrically heated device for removing paint, varnish, or wall paper from a wall or other surface.

In the removal of paint or varnish by the use of heat, the heat provided should be of sufficient intensity to soften the exterior paint or varnish so as to permit it to be removed by a heated scraper tool. To remove wall paper, it is necessary to first moisten the paper so that when the heat is applied, steam will be formed to soften the glue or paste beneath the paper, and the paper thus softened must be scraped from the wall by means of a relatively cool scraping member. In many instances a contractor is called upon, not only to remove paint and varnish, but wall paper while on the same job, and the present invention provides a single tool which may be selectively used for both purposes.

One object of the present invention is to provide an electrically heated scraper having a pair of interchangeable scraping blades, one of which may be used hot for removing paint or varnish, and the other blade used cold for removing wall paper.

Another object of this invention is to provide an improved form of electrically heated scraper having heating means in advance of the scraping edge for softening the wall covering.

A further object of this invention is to provide an electrically heated scraper of the above nature which will be simple in construction, relatively inexpensive to manufacture, compact, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view, which will appear as the description proceeds, there have been illustrated in the accompanying drawing two forms in which the invention may be conveniently embodied in practice.

In the drawing:

Fig. 1 is a top plan view of the electrically heated scraper as it appears when arranged for removing wall paper.

Fig. 2 is a side view of the same.

Fig. 3 is a broken side view of the scraper device as it appears when arranged to remove paint or varnish.

Fig. 4 is an end view of the same.

Fig. 5 is a vertical sectional view taken on the line 5—5 of Fig. 1.

Fig. 6 is a horizontal sectional view taken on the line 6—6 of Fig. 2.

Fig. 7 is a sectional view taken on the line 7—7 of Fig. 6.

Referring now to the drawing wherein like reference numerals designate like parts throughout the several views, the numeral 10 denotes a U-shaped casing formed of sheet metal and lined with heat insulating material, such as asbestos cloth or asbestos paper 11 at its top 12, sides 13 and 14, and ends 15 and 16. The bottom of the casing 10 is provided with a sheet metal unlined U-shaped cover 17, which is adapted to be heated by radiation from an electrical heating unit 18 disposed in the casing 10 above said cover 17 to heat the bottom 19 of said cover 17 to a red heat. The casing 10 is also provided with exterior rectangular end plates 20 and 21 (see Figs. 1, 2, 5 and 6), which plates are secured to the ends 15, 16 of the casing and the upstanding arms 22 and 23 of the cover 17, as by screws 24. The end plates 20 and 21 are each spaced from the casing cover by sheets 25 of insulating material, such as asbestos.

Electrical heating unit

The heating unit 18 comprises a frame or block 26 of insulating material, such as lava or fire brick, and two layers of coiled resistance wire 27, such as "nichrome", are threaded back and forth in a sinuous manner therethrough, one layer being above said block 26, and the other layer below it. The two layers of coiled wire are adapted to be separated by a thin partition member 28 extending between a pair of enlarged side members 29 and 30 of the block 26. The rows of resistance wire 27 are preferably arranged in series, and the ends of the wire 27 are connected to a pair of terminal posts 31 and 32 by screws 33 which also serve to secure said posts to the partition 28. A two-wire cable 34, having its wire ends 35 and 36 connected to the posts 31 and 32, respectively, is provided to connect the resistance wire 27 to a source of electrical power.

A horizontal handle 37 of insulating material, such as dry wood, is provided at the rear of the scraper and is connected to one end of the casing 10 by screws 38 and 39, which screws also pass into the casing 10 and are threaded into the enlarged side members 29 and 30, respectively, of the block 26, to securely attach said handle to said casing. The handle 37 is provided with a bore 40 through which the cable 34 is threaded.

Scraper blades

A pair of readily detachable scraper blades 41 and 42 are furnished with the scraper of this invention. The blade 41 is designed for use in re-

moving wall paper, while the blade 42 is for use in removing paint and varnish.

The paper-removing blade 41 is angular in shape and comprises a horizontally disposed flat body portion 43 which is secured to the top 12 of the casing 10, as by screws 44. A strip of heat insulating material 45 is disposed between the casing top 12 and the horizontal portion 43 to obstruct the flow of heat to said scraper blade 41. The paper scraper 41 also includes a vertically depending portion 46 which extends downwardly from the horizontal portion 43 and is spaced by it from the adjacent end 15 of the casing 10. The lower edge 47 of the portion 46 is preferably curved inwardly toward the casing 10 and is sharpened to facilitate the removal of the softened paper from the wall. An upstanding handle 48, secured by a nut 49 to the front end of the horizontal portion 43, is provided to permit the operator to use both hands in manipulating the scraper.

The paint and varnish scraper blade 42 (see Figs. 3 and 4) is secured to the end 15 of the casing in place of the end plate 20 and the sheet 25 of insulating material by the screws 24,—the blade 41 being first removed from the casing so as to avoid interference thereby when the tool is in use to remove paint or varnish from a surface. The blade 42 is provided with a flat sharpened edge 50 which extends a short distance below the bottom 19 of the cover 17. Since the paint and varnish scraper blade 42 is not insulated from the casing 10, it will become highly heated to substantially the same temperature as that of the bottom cover 17, and hence will operate in a red hot condition. Before using the blade 42, the handle 48 will be removed from the paper scraper blade 41 and screwed into a tapped hole 51 provided in the top wall 12 of the casing 10.

Operation

In operation, when it is desired to use the electrically heated scraper for removing wall paper, the angular blade 41 will be attached to the casing 10, as shown in Figs. 1 and 2, by the screws 44. The heating unit 18 through the cable 34 will then be connected to a source of electrical power to energize the sinuous heating wire 27. After moistening the wall paper, the scraper will be drawn toward the user by manipulation of the handles 37 and 48. It will be seen that passage of the heated bottom cover 17 over the moistened wall paper will cause steam to form in the paste beneath the surface of the paper and soften it, whereupon the paper may be easily removed by the sharp edge 47 of the angular blade 41. It will also be understood that the blade 41, being spaced a substantial distance from the end 15 of the

casing and heat-insulated from it by the asbestos strip 45, will be maintained at a relatively cool temperature, so that the paper removed from the wall will not adhere to said blade.

When it is desired to use the scraper of this invention to remove paint or varnish, it will only be necessary to take off the blade 41 together with the end plate 20 and the asbestos sheet 25, and substitute the blade 42 which will be attached in direct contact with the cover ends 15 and 22, respectively, by the screws 24 (see Fig. 3). The handle 48 will also be removed from the scraper blade 41 and attached to the top of the casing 10. When the scraper is then electrically heated and is drawn along the operating surface, the paint or varnish will be softened by the heat and will be engaged by the hot sharpened edge 50 of the blade 42 which will easily scrape the softened paint or varnish from the painted surface.

While there have been disclosed in this specification two forms in which the invention may be embodied, it is to be understood that these forms are shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosures, but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new and for which it is desired to secure Letters Patent, is:

1. In a wall scraper, a casing having an electrical heating unit located therein, a cover for the bottom of said casing telescoped therewith and adapted to be maintained at red heat by said heating unit, a scraper blade connected to said casing and having a sharpened lower edge offset from said casing, said scraper blade extending across the width of said casing, a horizontal insulating handle extending from the end of said casing opposite from the scraper blade, and an upstanding insulating handle secured to an intermediate portion of said casing.

2. A structure as specified in claim 1, in which said scraper blade is detachably held in abutment with the end of said casing and heated thereby for removing paint softened by said bottom cover when the latter is drawn over it by the manipulation of said handles.

3. A structure as specified in claim 1, in which said scraper blade is insulated and spaced from the end of said casing and maintained at a relatively cool temperature, whereby it will remove from a wall without sticking, wet paper which has been softened by the drawing over it of said red hot casing.

FREDERICK PREISSER.