

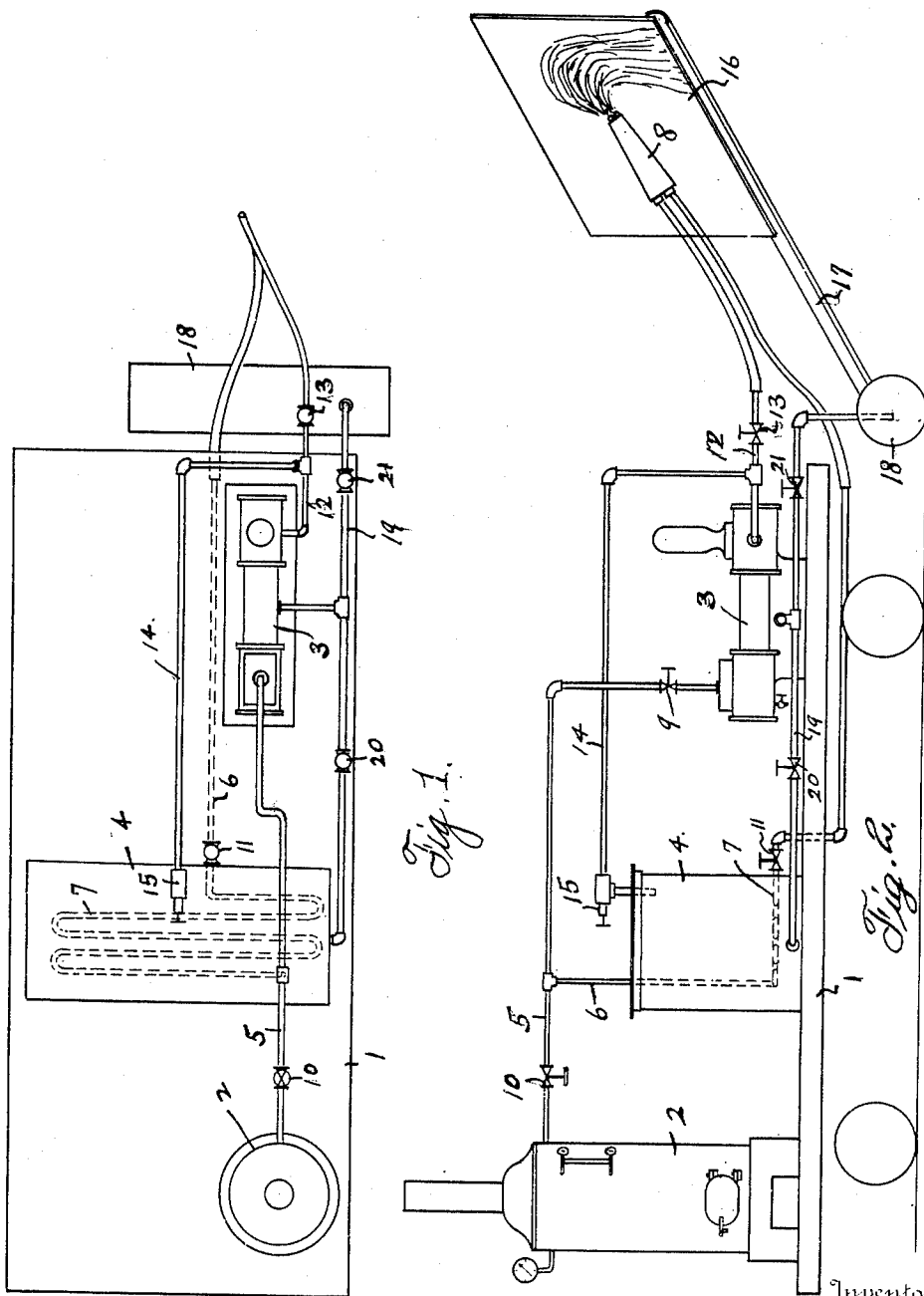
Nov. 30 , 1926.

1,608,635

O. H. THERIOT

APPARATUS FOR REMOVING PAINT

Filed Nov. 18, 1921



☐ Inventor
Oswald H. Theriot

Oswald H. Theriot

৯৬৮

Hardway Cathey Attorneys

UNITED STATES PATENT OFFICE.

OSWALD H. THERIOT, OF HOUSTON, TEXAS.

APPARATUS FOR REMOVING PAINT.

Application filed November 18, 1921. Serial No. 516,203.

This invention relates to new and useful improvements in an apparatus for removing paint.

One object of the invention resides in the provision of an apparatus of the character described specially designed for the purpose of cleansing surfaces preparatory to painting the same, and particularly adapted for cleansing the old paint from surfaces to be repainted.

Another object of the invention resides in the provision of an apparatus whereby hot steam, followed by a hot cleansing agent may be applied to the surface to be cleansed in an effective and expeditious manner.

A further feature resides in the construction whereby the cleansing agent, after it is used, may be reclaimed for reuse.

A still further feature of the invention consists in the novel process whereby the cleansing fluids are applied to the surface to be cleansed.

With the above and other objects in view this invention has particular relation to certain novel features of construction, arrangement of parts, and use an example of which is given in this specification and illustrated in the accompanying drawings, wherein:—

Figure 1 is a plan view of the apparatus, and

Figure 2 is a side elevation thereof.

Referring now more particularly to the drawings the numeral 1 designates the supporting frame upon which the apparatus is mounted. This frame is preferably carried on wheels so as to be portable. The numeral 2 designates a boiler provided to generate steam. The numeral 3 designates a hydraulic pump and the numeral 4 designates a vat, preferably located between the boiler and pump. A steam line 5 leads from the boiler to the pump and carries the steam by which the pump is operated. A branch line 6 leads from the steam line and is formed into a coil 7 in the bottom of the vat and leads thence to the nozzle 8. The steam line 5 has shut off valves 9 and 10 on opposite sides of the connection of the branch line thereto and the branch line has a shut off valve 11 beyond the coil 7. The pump 3 has a discharge line 12, controlled by the shut off valve 13, which is also connected to the nozzle 8. Both lines 6 and 12 have hydraulic hose connections to said nozzle. Leading from the discharge line 12 there is a return

line 14 which discharges into the vat 4 and which is controlled by the relief valve 15.

The article to be cleansed is placed on a suitable inclined platform 16 leading downwardly from which there is a gutter 17 which enters a receiving tank 18. A pressure pipe 19 connects this tank with the vat 4 and is connected into the pump 3. This pipe is controlled by suitable valves 20 and 21 on opposite sides of its connection with the pump.

In operation the cleanser, usually consisting of a solution of soda, lime and potash, is placed in the vat 4 and is heated to the boiling point, and kept at that temperature the valve 11 being closed. The pump is then started by opening the valves of the steam line 5. The valve 20 of the pipe 19 is opened and the valve 21 of said pipe is closed and the valve 13 of the discharge line 12 is also opened and the cleansing solution is forced under strong pressure against the surface to be cleansed. The nozzle 8 is then moved, by hand over the surface to be cleansed, and all dirt, grease and old paint are thereby loosened up and removed. The solution will drain down onto the platform 16 and will be conducted by the gutter 17 into the tank 18.

While the solution is being forced against the surface to be cleansed the relief valve 15 is partially opened to prevent too much pressure against the hose of the line 12. The surplus solution, not passing through the nozzle will be returned to the vat through the line 14.

The pump is then stopped and the valve 11 is opened and the surface to be cleansed is thoroughly washed with hot steam to remove all of the acid or foreign matter adhering thereto and is then removed from the platform and washed with water.

In order to return the cleansing fluid from the tank 18 to the vat 4 the valves 13 and 20 are closed and the valve 21 is opened and said fluid may then be pumped, by the pump 4, through the lines 19, 12 and 14 and returned to said vat.

What I claim is:—

1. An apparatus of the character described including a steam generator; a hydraulic pump; a vat for containing liquid; a steam line leading from the generator to the pump; a branch line leading from the steam line, and formed into a coil in said vat,

and terminating in a nozzle outside of the vat, said nozzle being formed to simultaneously discharge steam and liquid in converging streams; valves carried
 5 by the steam line on opposite sides of the branch line; a shut-off valve carried by the branch line between the coil and nozzle; a discharge line leading from the pump, and also connected to said nozzle; a shut-off
 10 valve for said discharge line; a return line leading from the discharge line, and discharging into said vat, a relief valve controlling said return line; a receiving tank; a line connecting said vat and tank, and con-
 15 nected into the pump; valves controlling said last mentioned line, and arranged on opposite sides of the connection thereof with said pump, an inclined platform forming a support for the article to be cleaned.
 20 2. An apparatus of the character described, including a steam generator; a hydraulic pump; a liquid containing vat; a steam line leading from the generator to the pump; a branch line leading from the steam line, and
 25 formed into a coil in said vat, and terminat-

ing in a nozzle outside of the vat; valves carried by the steam line on opposite sides of the branch line; a shut-off valve carried by the branch line between the coil and
 30 nozzle; a discharge line leading from the pump, and also connected to said nozzle, said nozzle being formed to simultaneously discharge steam and liquid at the same point on the surface being cleansed; a shut-off
 35 valve for said discharge line; a return line leading from the discharge line, and discharging into said vat; a relief valve controlling said return line; a receiving tank; a line connecting said vat and tank, and con-
 40 nected into the pump; valves controlling said last mentioned line, and arranged on opposite sides of the connection thereof with said pump; an inclined platform forming a support for the article to be cleansed, and
 45 an inclined gutter leading from said platform and entering said tank.

In testimony whereof I have signed my name to this specification.

OSWALD H. THERIOT.