

J. H. POWERS.  
 TOOL FOR REMOVING WALL PAPER.  
 APPLICATION FILED MAY 4, 1917.

1,264,973.

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Fig. 1.

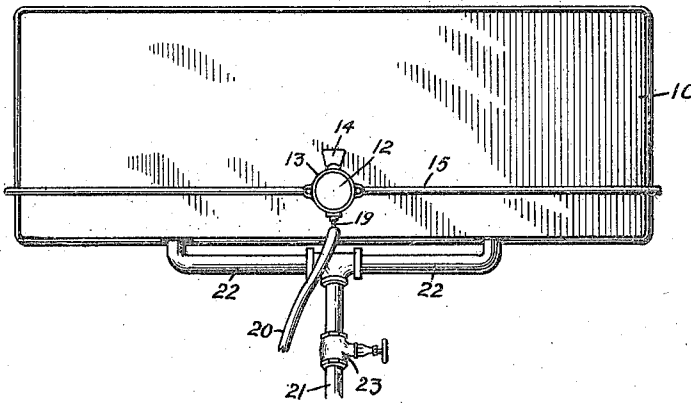


Fig. 2.

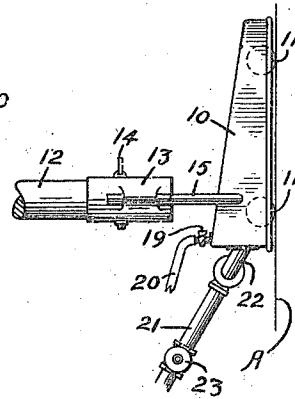


Fig. 3.

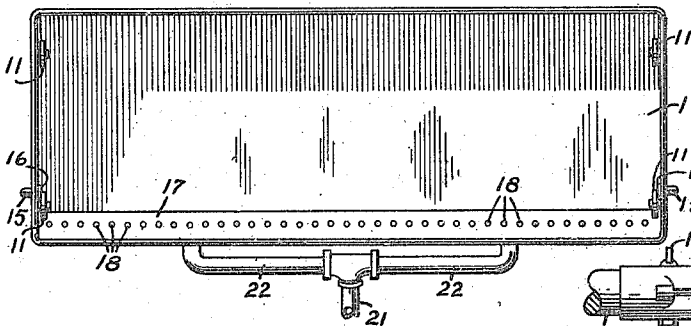


Fig. 4.

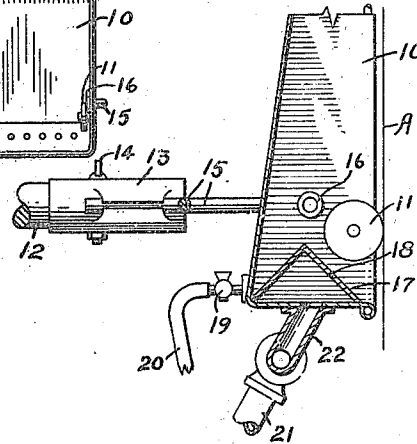
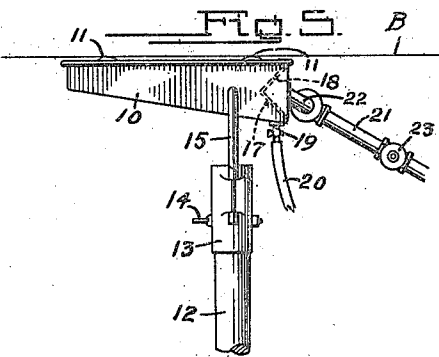


Fig. 5.



Inventor  
 James H. Powers.

*Lancaster*  
*and Allmon*  
 Attorneys

# UNITED STATES PATENT OFFICE.

JAMES H. POWERS, OF SARATOGA SPRINGS, NEW YORK.

## TOOL FOR REMOVING WALL-PAPER.

1,264,973.

Specification of Letters Patent.

Patented May 7, 1918.

Application filed May 4, 1917. Serial No. 166,458.

*To all whom it may concern:*

Be it known that I, JAMES H. POWERS, a citizen of the United States, and a resident of Saratoga Springs, in the county of Saratoga and State of New York, have invented certain new and useful Improvements in Tools for Removing Wall-Paper, of which the following is a specification.

The present invention relates to a tool or device for removing paper and the like from walls, ceilings, and other surfaces, and has particular reference to a tool in which steam is employed.

An object of the present invention is to provide a tool for directing relatively fine streams or jets of steam under pressure against the material to be removed for thoroughly impregnating the material with the steam to soften the glue or other adhesive and loosen the material from the surface.

Another object is to provide means for reducing the frictional contact between the tool and the wall, and to provide for the escape of a quantity of the steam immediately about the tool adjacent to the wall, to spread the steam over a relatively wide area and increase the capacity and efficiency of the tool.

The above, and various other objects and advantages of this invention will be in part described, and in part understood, from the following detailed description of the present preferred embodiment, the same being illustrated in the accompanying drawing wherein:

Figure 1 is an outer side elevation of a wall paper removing tool constructed according to the present invention.

Fig. 2 is an end elevation of the same as applied to a wall.

Fig. 3 is an inner side elevation of the tool.

Fig. 4 is an enlarged fragmentary view, showing in longitudinal section, the lower or inner end of the tool.

Fig. 5 is an end elevation of the tool inverted and as applied to a ceiling or the like.

Referring to the drawing, 10 designates the casing or hood of the tool which is substantially of rectangular elongated form, is open at its inner side, and is deeper at one end than at the other to provide an outer inclined wall. The hood 10 is provided preferably at opposite ends and adjacent to its corners with supporting rollers 11 pro-

truding slightly beyond the marginal edge of the hood and adapted for engagement against a wall A or other surface.

The hood or casing 10 may be supported by a handle 12 of suitable length and which is in the form of a pole or the like fitting at one end in a sleeve or socket 13. A bolt 14 or the like may be employed for holding the handle 12 in the socket, and the latter is secured to the intermediate portion of a bail 15 extending across the outer side of the hood 10 and having pivotal engagement at its free end in bearings 16 formed in the opposite ends of the hood 10. The bail 15 is preferably hinged to the hood 10 adjacent to its deeper end, and when applied to the wall A, the said end of the hood is preferably arranged lowermost.

The said lower end of the hood or casing 10 is provided with a steam distributor in the form of a tube or the like which, as shown in the present instance, is in the form of an inverted substantially V-shaped plate 17 secured against the lower end of the hood within the same, and forming, with said lower end of the hood, a transversely extending chamber adapted to distribute steam throughout the entire width of the hood. The angularly formed plate 17 provides oppositely inclined outer and inner walls, and is provided in the outer walls thereof, with a substantially horizontally extending line of perforations 18 forming restricted passages for the egress of steam from the tube, the inclination of the outer wall of the plate 17 directing the jets of steam from the passages 18 at an angle less than a right angle against the wall A. The inner wall of the plate 17 is inclined downwardly toward the bottom of the outer side of the hood, and forms therebetween a pocket adapted to collect and hold the water of condensation which accumulates against the inner side of the hood and prevents the water from interfering with the passage of the steam through the jet openings 18. A drain cock 19 is tapped in the outer side of the hood 10 at its lower end, and may be connected to a flexible tubing 20 for carrying off the water of condensation. This water pocket is effective, not only when the tool is arranged in upright position as shown in Figs. 2 and 4, but also when the tool is inverted as shown in Fig. 5 and applied against the ceiling B. The outer inclined wall of the hood 10 provides an inclined surface which

slopes downwardly toward the inner end of the tool when the latter is inverted so as to direct the water of condensation into the pocket.

- 5 Steam may be admitted in any suitable manner to the distributing tube, and one means is shown in the present drawing where a steam supply pipe 21 is provided with two branches 22 which are connected to the bottom of the distributing tube adjacent to the opposite ends of the same. This arrangement insures an even distribution of the steam throughout the length of the distributing tube, and offsets to a considerable degree the condensation of the steam within the tube.

- In operation, it is only necessary to grasp the handle 12 and apply the open side of the hood 10 against the wall A or other surface. The rollers 11 contact with the wall and hold the marginal edge of the hood 10 in slightly spaced relation from the wall to reduce frictional contact between the tool and the wall and to also provide a relatively small marginal opening about the hood between the same and the wall. Steam is admitted in any suitable manner through the steam pipe 21 and its branches 22 into the distributing member 17. The steam is delivered under pressure to the relatively small jet openings 18 at an angle to the wall and is adapted to thoroughly saturate the paper or other covering on the wall, and by virtue of its impact at an angle, to urge the paper or other material to loosen from and slip along the wall surface.

- The steam impacting against the surface of the material and wall is deflected backwardly into the hood 10 and expands throughout the interior thereof, and is urged by the hood against the wall covering in advance of the steam jets so as to initially moisten the wall covering. The steam also escapes in a small quantity about the marginal edge of the hood and moistens the wall covering about the tool so that the wall covering is in condition to be readily loosened when the steam jets are applied thereto.

- 50 As above pointed out, the inner inclined wall of the distributing member 17 forms a water-receiving pocket to collect the products of condensation from the steam and

hold the same out of the path of the steam jets so that at no time will the jets of steam be interrupted during the operation of the tool. The drain cock 19 may be continually open during the use of the tool, and the flexible tubing 20 led to any suitable point of discharge for constantly draining the pocket, or if desired, the water pocket may be emptied from time to time as is found desirable. A valve 23 may be interposed in the feed pipe 21 to regulate the flow of steam to the distributor 17 to modify or increase the pressure of the steam as is found necessary during the use of the device.

It is of course understood that various changes and modifications may be made in the details of construction of the above specifically described device without departing from the spirit of the invention, and being restricted only by the scope of the following claims.

I claim:

1. In a wall paper removing device, the combination of a hood, means for supporting the hood against and moving the same over a wall, a steam distributor mounted in the lower end of the hood and having inner and outer inclined faces and jet openings in the outer face adapted to face the wall at an angle, and means for admitting steam under pressure to said distributor for passage in jets through said openings against the wall at an angle, the inner face of said plate providing between the same and said hood a pocket adapted to receive the water of condensation collecting in the hood.

2. In a wall paper removing device, the combination of a hood, a handle pivotally mounted upon the hood for supporting the same against the wall and moving the hood thereover, an angular plate secured in inverted position in the bottom of the hood to form therewith a distributing chamber, said plate having in its outer face a plurality of jet openings and providing between its inner face and the adjacent side of the hood a pocket adapted to receive the water of condensation collecting in the hood, means for admitting steam under pressure into said distributing chamber, and means for draining said pocket.

JAMES H. POWERS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."