H. F. MARSHALL & W. F. CLARK.

SCOURING MACHINE.

APPLICATION FILED JUNE 16, 1909.

957,074. **Patented May 3, 1910.**

Fig. 1.

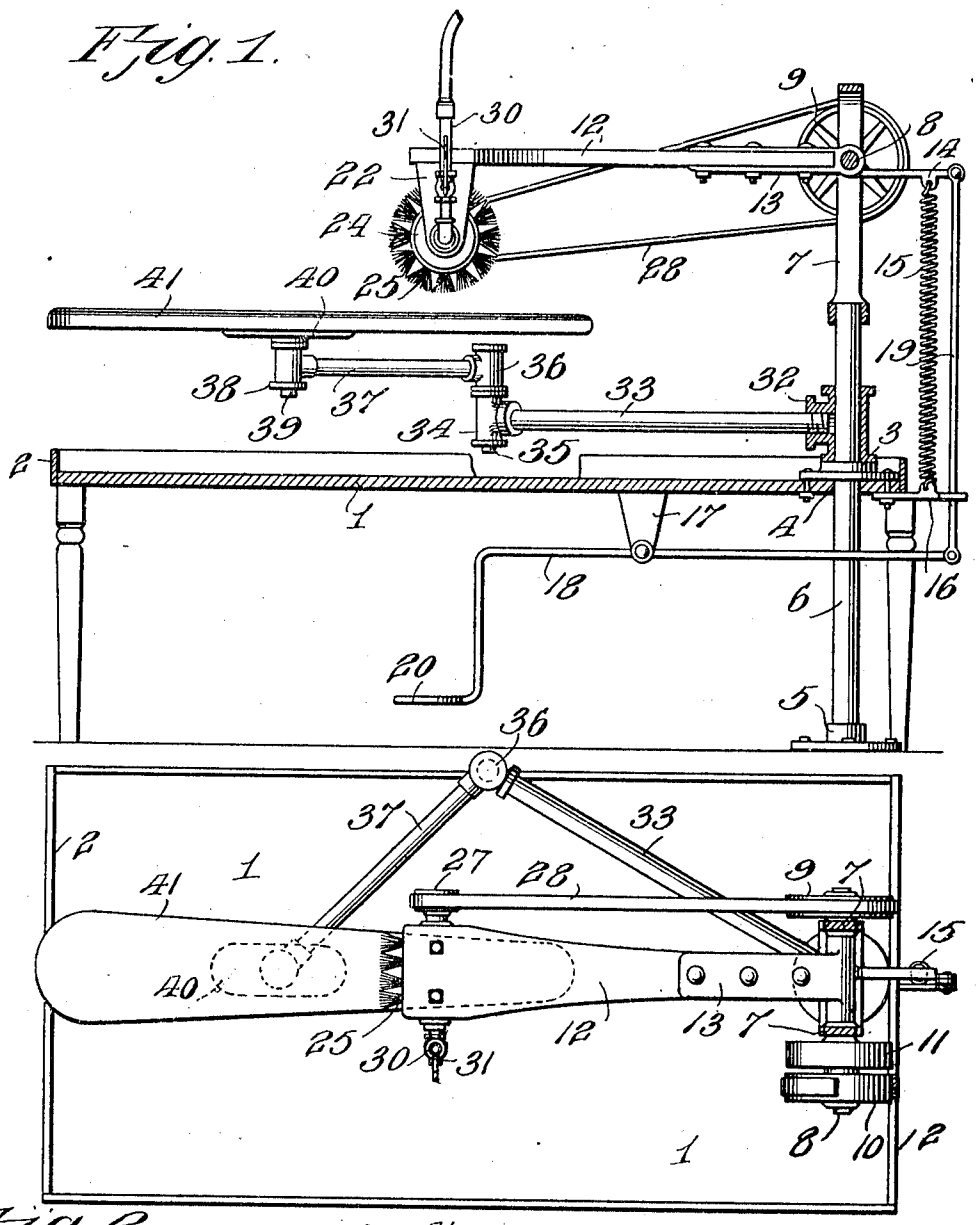

Fig. 2.

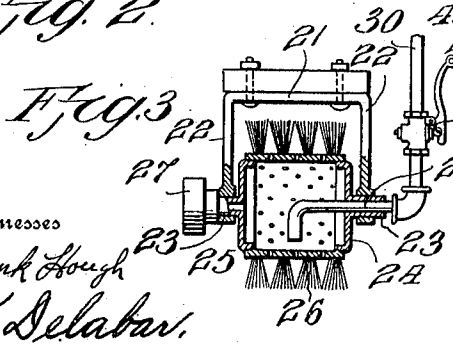

Fig. 3.

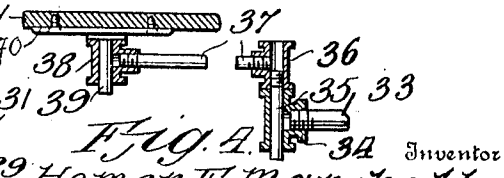

Fig. 4.

Witnesses

Frank Hough

K. Delabar.

Inventor

Homer F. Marshall,

Warren F. Clark,

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

HOMER F. MARSHALL, OF NORTH ADAMS, AND WARREN F. CLARK, OF PITTSFIELD, MASSACHUSETTS, ASSIGNORS TO BERKSHIRE MACHINE COMPANY, OF PITTSFIELD, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

SCOURING-MACHINE.

957,074. Specification of Letters Patent. Patented May 3, 1910.

Application filed June 16, 1909. Serial No. 502,542.

To all whom it may concern:

Be it known that we, HOMER F. MARSHALL and WARREN F. CLARK, citizens of the United States, residing at North Adams and Pittsfield, respectively, in the county of Berkshire and State of Massachusetts, have invented new and useful Improvements in Scouring-Machines, of which the following is a specification.

This invention relates to scouring machines and particularly to those for scouring clothes, and an object of the invention is to provide effective and novel means for holding the clothes during the cleaning operation out of contact with the drip pan and to provide a vertically adjustable cleaning brush which is adapted for movement toward or away from the clothes support.

Another object of the invention resides in the provision of foot actuated means whereby the cleaning brush can be operatively held into engagement with the material to be operated upon so that the operator will have full use of both hands in manipulating the work support.

The above mentioned and other objects are attained by the construction, combinations and arrangements of parts, as disclosed on the drawing, set forth in this specification, and particularly pointed out in the appended claims.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views: Figure 1 is a side elevation of the scouring machine. Fig. 2 is a top plan view of the machine. Fig. 3 is a detail section taken through the cleaning brush. Fig. 4 is a detail section through a portion of a work support and the pivotal bearings therefor.

The scouring machine preferably consists of a drip pan 1 which in this instance is provided with supporting legs or the like. The edge portions of the said drip pan have secured thereto suitable straps or flanges 2 which are provided for a purpose to be hereinafter described. The drip pan adjacent to one end has secured thereto a collar 3, the aperture of which is disposed in line with a passage 4 formed in the pan and with a socket 5 which is preferably mounted upon the floor. A post 6 extends upwardly from the socket 5 and extends through the passage 4 and the collar 3 and has its upper end disposed in suitable spaced relation to the upper surface of the pan 1, and as shown the said upper end of the post carries a yoke 7, the vertical arms of which support a driven shaft 8. The shaft 8 is provided at one end with a band pulley 9 and at its other end with a band pulley 10 and with a similar but loose pulley 11. The construction just described is such that the pulley 10 can be geared in any convenient well known manner to a motor or other well known power source as will be understood.

An arm 12 is disposed above the pan 1 and has secured thereto a bearing member 13 which is mounted upon the shaft 8 in such manner that the arm 12 can be moved vertically. The member 13 has formed integrally therewith an extension 14 with which is connected one end of a retractile spring 15, the other end of said spring being secured to a bracket 16 upon the pan 1. A bracket 17 is mounted beneath the pan 1 and pivotally supports a lever 18, the rear end of the lever being connected to one end of a rod 19, the other end of said rod being connected with the rear extremity of the extension 14. The front end of the lever 18 extends downwardly and is provided with a foot engaging portion or treadle 20. The front end of the arm 12 supports a bracket 21 which carries depending spaced vertical arms 22, and as shown these arms receive trunnions 23 which extend from the heads 24 of a brush 25. The main body portion of the brush comprises a cylindrical perforated shell 26 from which extends a plurality of suitable bristles, as shown. One of the trunnions 23 has secured thereto a pulley 27 which is geared to the pulley 9 by means of a belt 28. The other trunnion 23 is hollow and receives a pipe 29. One end of the pipe is bent at right angles and is disposed between the walls of the hollow shell which forms the main body portion of the brush 25, the other end of the pipe is connected to a conveying tube 30 which is adapted to receive cleaning fluid from any

suitable source. To regulate the supply of the cleaning fluid to the brush 24 we provide the conveying tube 30 with a manually operated valve 31.

A collar 32 is revolubly mounted upon the post 6 and is supported upon the collar 3, and as illustrated this collar 32 carries a horizontally disposed rod 33 located in spaced relation to the surface of the pan 1. The forward extremity of the arm 33 carries a bearing member 34 in which is revolubly mounted a bearing post 35. A collar 36 is mounted upon the post 35 and carries an arm 37 which is disposed in parallel relation to the arm 33. The arm 37, at its forward end carries a bearing member 38, in which is revolubly mounted a vertically disposed pintle or post 39. The post 39 is provided at its upper end with a bracket or base flange 40 which is suitably secured to the bottom face of a work support 41.

The construction of the machine herein shown and described is such that the work support 41 is mounted for horizontal movement and for various angular movements in a horizontal plane above the surface of the pan 1 and may be manually operated so that it can be effectively brought into working engagement with the revolubly mounted cleaning brush 25. The spring 15 which connects the pan 1 with the arm 12 actuates the latter so that the brush carried thereby is normally held spaced from the work support 41, and in this manner it will be apparent that the operator of the machine can conveniently insert the material between the brush and the said work support. During the scouring operation, assuming the foot-actuated lever 18 to be manually operated so as to actuate the arm 12 in order that the cleaning brush can be moved to its operative position, or in other words into engagement with the material upon the work support it will be seen that the said support in view of its substantially unlimited horizontal angular adjustments will allow the operator of the machine to effectively bring the particular point of the material to be operated upon into engagement with the brush.

We do not desire to limit ourselves particularly to the precise construction of the brush, as it is obvious that any well known fountain brush may be substituted in lieu of the one shown. By providing the pan 1 with a surrounding flange it will be appreciated that the surplus cleaning liquid or fluid which is discharged from the brush onto the table will be effectively confined upon the latter. By arranging the support 41 in such position with respect to the pan it will be understood that the material to be operated upon will be effectively held away from the pan and will not come in contact with the waste cleaning fluid and therefore the material will not become unnecessarily soiled or dampened.

We claim:—

1. A scouring machine comprising a pan, a vertically adjustable arm located above the pan, a revoluble brush upon the arm, and an angularly adjustable work support movable beneath the brush.

2. A scouring machine comprising a pan, a pivotally mounted arm located above the pan and disposed thereabove, a work support above the pan adapted for horizontal angular adjustment beneath the brush, and means for normally holding the brush spaced from said support.

3. A machine of the class described comprising a pan, a vertically adjustable arm, a revoluble brush carried by the arm, a work support mounted above the pan and adapted for movement beneath the brush, spring means for normally holding the brush spaced from the support, and means for actuating the said arm so that the brush can be forced into engagement with said support.

4. A machine of the class described comprising a pan, a vertically extending post, a revoluble arm upon the post, a work support connected with said revoluble arm and adapted for horizontal angular adjustment above the pan, and a vertically movable brush adapted to be brought into engagement with said support.

5. A machine of the class described comprising a pan, a fixed support, a horizontally swinging arm mounted upon said support and disposed above the pan, an angularly adjustable horizontally disposed work support carried by said arm, and a vertically adjustable brush located above the said work support.

6. A machine of the class described comprising a pan, a vertically extending fixed post at one end of said pan, a horizontally disposed swinging arm mounted upon the post and disposed above the said pan, an angularly adjustable arm carried by the first named arm, a revoluble work support carried by the last named arm, and a brush located above the said work support.

7. A scouring machine comprising a pan, a work support mounted for longitudinal and angular adjustment above said pan, and a revoluble cleaning brush mounted above the pan for vertical movement.

8. A scouring machine comprising a pan, a work support located above the pan and adapted for angular and longitudinal adjustment above the pan, a revoluble brush disposed above the work support, and spring means engaged with said brush for normally

holding the same in spaced relation to the pan.

9. A scouring machine comprising a pan, a vertically swinging arm located above the pan, a driven brush carried by the arm, means for feeding liquid to said brush and for discharging the same therefrom, a work support mounted above the pan and adapted to be moved into engagement with said brush, and means for normally holding the brush spaced from said support.

In testimony whereof we affix our signatures in presence of two witnesses.

HOMER F. MARSHALL.
WARREN F. CLARK.

Witnesses:
LE ROY E. SHAW,
JOHN A. WHITE.