

(No Model.)

F. E. ANDERSON.
BARREL WASHER.

No. 517,091.

Patented Mar. 27, 1894.

Fig. 1.

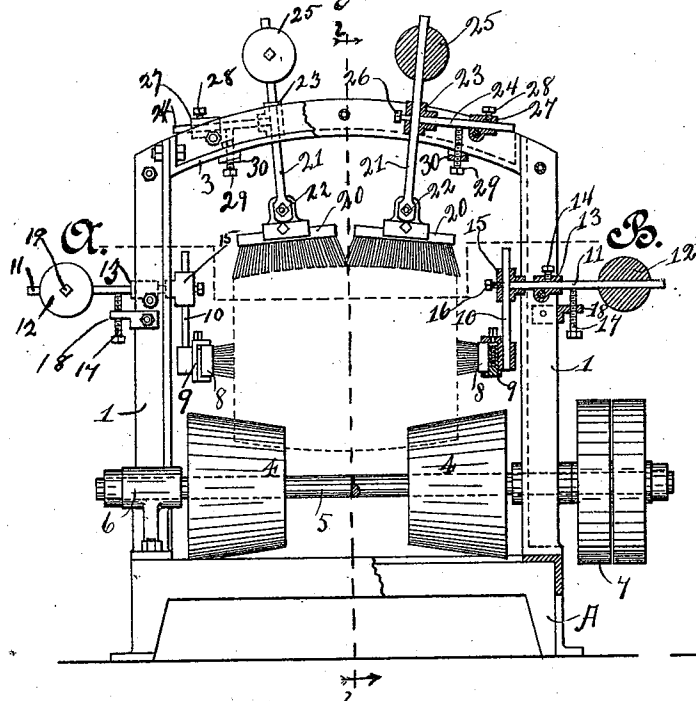
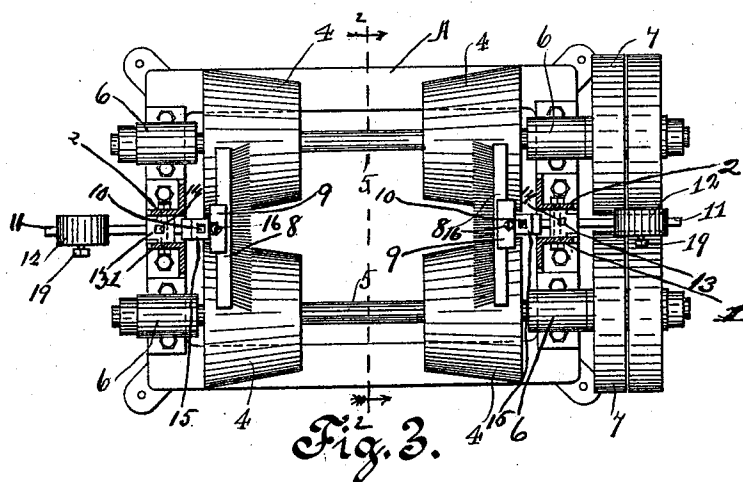
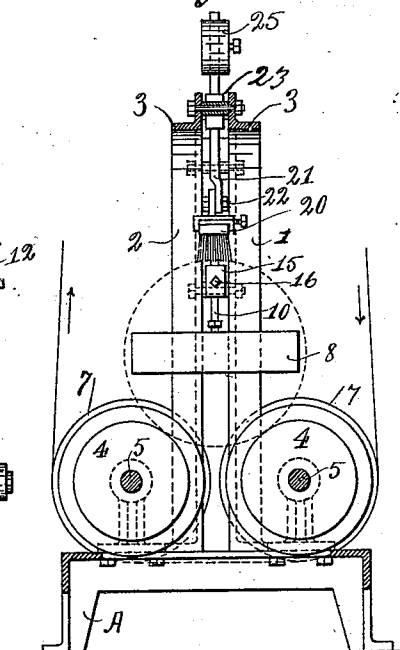


Fig. 2.



WITNESSES:

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BARREL-WASHER.

SPECIFICATION forming part of Letters Patent No. 517,091, dated March 27, 1894.

Application filed May 31, 1893. Serial No. 476,184. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK E. ANDERSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Barrel-Washing Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a novel construction in a barrel washing machine, the object being to provide a device of this character with brushes for scrubbing the barrel that not only can be adjusted to act upon barrels of the regular sizes, but will also adjust itself to conform to the slightly varying dimensions of barrels of any size, it being noted, for instance, that all half barrels are not of the same size exactly, but vary sometimes as much as one inch.

The invention consists in the features of construction and combinations of parts hereinafter fully described and specifically claimed.

In the accompanying drawings illustrating my invention,—Figure 1 is an end elevation of a barrel washing machine constructed in accordance with my invention and partly broken away for convenience of illustration. Fig. 2 is a vertical sectional view taken on the lines 2—2 of Figs. 1 and 3. Fig. 3 is a horizontal sectional view taken on the line A—B of Fig. 1.

Referring now to said drawings, A indicates the base of the machine from the sides of which rise two uprights 1 and 2. These uprights stand parallel with each other and a little distance apart. The uprights are joined at their upper ends by cross pieces 3, which also stand parallel with each other. It will thus be seen that the uprights in connection with the cross pieces provide two frames or arches located close to each other and parallel. The brushes for washing the barrel are mounted upon these frames or arches as will be fully described.

The devices for supporting and revolving the barrel to be washed consist of four rollers 4, carried by shafts 5, that are supported in bearings 6 upon the base A of the machine. These rolls 4 are located near the sides and

ends of the machine, as shown in Fig. 3, and are tapered toward their inner ends so as to provide a seat for the barrel. The devices for rotating said rolls consist of pulleys, 7, upon said shafts, 5, to be turned in an obvious manner.

From the foregoing description it will be seen that a barrel placed upon the rollers 4, will be turned and at the same time supported thereby.

I will now proceed to describe the construction of the brushes for washing the barrel.

In the drawings I have illustrated four brushes, two of which act upon the end of the barrel while the other two are arranged to wash the side of the barrel. These brushes can of course be constructed of bristles or any other desired material that will serve to scrub the barrel, against which they are held. The brushes 8 that serve to act upon the ends of the barrel are as long as the diameter of the largest barrel to be washed by the machine, and are located to be held approximately diametrically against the end of the barrel, as illustrated. The said brushes 8, are held by brush-holders 9, and these brush-holders 9, are secured to the lower end of the rod 10. This rod 10 is adjustably secured at its upper end to a pivoted rod 11, supported between the frames or arches of the machine, and provided at its outer end with a weight 12, that serves to exert an influence to throw the brushes 8 inwardly in an obvious manner. The pivoted rod 11, passes through a sleeve 13, and by means of this sleeve 13, which is pivoted to the upright frame, said rod 11, attains its pivotal connection aforesaid. The said rod 11 is movable longitudinally through the sleeve 13, and is secured in any adjusted position by a set screw 14, so that the brush carried by said rod can be moved in or out to accommodate the machine to barrels of different sizes, as will be manifest. The inner end of the rod 11 carries a coupling 15 through which the rod 10 extends, and is movable longitudinally; and a set screw 16 serves to hold the rod 10 in any adjusted position. It will be seen by this construction that the brush 8 can be adjusted vertically. On the outer side of the uprights is located a stop to limit the downward movement of the outer end portion of the rod 11, so that the inward limit of

movement of the brush 8 can be regulated: said stop consisting of a set screw 17 carried by bracket 18 upon the frame of the machine, and located below the rod 11. In this way it

5 will be seen that by turning the said set screw 17 the downward movement of the rod 11 can be regulated for the desired purpose. The construction of both brushes 8 and the devices for carrying the same are similar, 10 and it will be understood, for instance, if the barrels to be washed are half barrels, the rods 10 and 11 and stop 17 will be arranged so that the ends of the brushes will bear against the ends of the barrel when the latter is located between the same, and resting upon 15 the rolls 4, so that as the barrel is turned, said brushes will serve to scrape the ends thereof. It will be noted further that the said brushes being supported by freely swinging connections on the uprights of the machine, they can be pushed outwardly so that the barrel can be placed in and removed from between without attention being paid to the brushes, as they automatically accommodate 20 themselves thereto, the weights 12, serving to move the brushes inwardly in contact with the ends of the barrel. The said weights 12 are adjustable longitudinally upon the rods 11 by reason of the rods passing through openings in said weights, and a set screw 19 to hold said weights in any position.

The brushes 20 which serve to scrub the sides of the barrel are secured to the lower ends of rods 21 by a pivotal connection 22. 35 The said rods 21 pass through couplings 23 that are carried by the outer end of rods 24, pivoted to the cross pieces 3 of the machine. The said rod 21 carries at its upper end portion a weight 25 and the said rod is adjustable longitudinally within the coupling 23, and can be secured in place by a set screw 26. The pivotal connection between the rod 24 and the cross pieces 3 of the machine is attained by a sleeve 27 that is pivoted between said 45 cross-pieces and through which said rod 24 passes. The rod 24 can be moved longitudinally within the sleeve 27 and rigidly secured in place by a set screw 28. To limit the downward movement of the brush 20, I arrange a stop to engage the lower face of the rod 24, which stop consists of a set screw 29 passing through a stationary part 30 of the machine, and it will be seen that by turning said set screw the limit of the downward movement 55 of said rod 24 and consequently of the brush 20 can be nicely regulated. As before described, two of these brushes 20 are employed to scrub the sides of the barrel, and their combined lengths placed end to end are about the length of the largest barrel to be washed 60 by the machine. By means of the adjustable connection the said brushes can be arranged to accommodate various sizes of barrels, and in thus arranging it the set screw 29 can be

so regulated that the brushes can reach the 65 smallest of any particular barrel of a certain size, and since the said brushes are held by freely swinging devices, they will accommodate themselves automatically to the barrels of varying dimensions, and will rise to allow 70 the barrel to reach its position in the machine, and it will then assume its operative position upon the barrel. It will be noted therefore that a machine constructed as above described requires little attention during op- 75 eration, and can be arranged to act upon many kinds of barrels: for instance, in a brewery a machine of this kind could be used for washing a barrel, a half barrel, a quarter barrel, and an eighth barrel. The operator 80 would in the first place adjust the brushes for acting upon any of these sizes, and when ready the rollers can be rotated and the barrels fed into the machine either by hand or from a chute or trap-way. As soon as the 85 barrel is placed upon the rolls the brushes will accommodate themselves thereto, and the barrel being turned by the rollers, every portion of its exterior will be thoroughly and efficiently scrubbed. It is not necessary to 90 remove the barrel but when another barrel comes along either upon a track-way or is shoved into the machine by hand, it will knock any barrel therein out through the other side, as will be obvious. 95

It will be understood, of course, that except in the claims for specific construction, I do not wish to be limited to the precise construction and arrangement of parts herein shown, but contemplate making all mechanical changes and substitutions that may fall within the scope of the appended claims. 100

I claim as my invention—

1. In a barrel washing machine, the combination with the supporting frame and devices 105 for supporting and turning a barrel, of brushes secured to rods adjustably secured to rods pivoted to the frame of the machine, devices for yieldingly holding said brushes against a barrel supported by the machine, 110 and stops for limiting the inward movement of said brushes, substantially as described.

2. In a barrel washing machine, the combination with the supporting frame and devices 115 for supporting and turning a barrel, of brushes secured to rods adjustably secured to rods that are pivotally and adjustably secured to the frame of the machine, devices for yieldingly holding said brushes against a barrel supported by the machine, and stops 120 for limiting the inward movement of said brushes, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK E. ANDERSON.

Witnesses:

HARRY COBB KENNEDY,
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