J. J. DENNING.

TUMBLER FINISHING MACHINE.

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1,046,996. Patented Dec. 10, 1912.

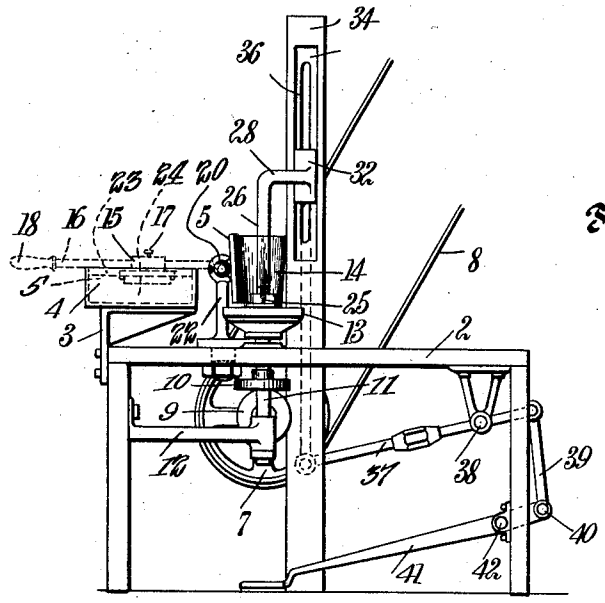

Fig. 1.

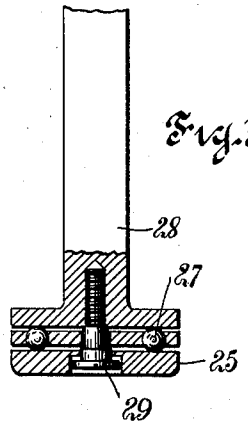

Fig. 3.

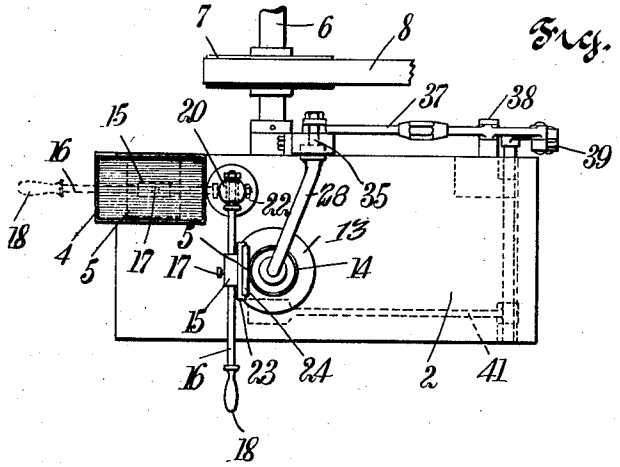

Fig. 2.

WITNESSES

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TUMBLER-FINISHING MACHINE.

1,046,996. Specification of Letters Patent. Patented Dec. 10, 1912.

Application filed January 16, 1912. Serial No. 671,408.

To all whom it may concern:

Be it known that I, JAMES J. DENNING, a citizen of the United States, and a resident of Gas City, in the county of Grant and State of Indiana, have invented a new and Improved Tumbler-Finishing Machine, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved structure whereby a tumbler or the like, may be quickly polished or finished.

A further object of the invention is the provision of improved means for holding and rotating a tumbler associated with a universally pivoted buffing member designed to be braced against the tumbler while rotating for polishing or finishing the same.

In carrying out the objects of the invention, a suitable framework of any desirable kind is provided on which is mounted a rotating shaft carrying a tumbler rest. The rotating shaft is connected with any suitable source of power for causing a proper rotation of the tumbler, while the buffer is pressed against the same. The buffer is loosely mounted upon the support or is rather connected to the support by a universal joint and is movable pivotally to a cooling tank provided near the support for cooling the buffer or for any desired purpose. A clamping arm is fitted into the tumbler and connected up with a reciprocating crank lever so that the tumbler is positively clamped to the rotating shaft while the buffer is operating.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side view of an embodiment of the invention; Fig. 2 is a top plan view of the structure shown in Fig. 1; and Fig. 3 is a detail fragmentary sectional view of the presser head.

Referring to the accompanying drawings by numerals, 2 indicates a table or support of any desired kind which carries a bracket 3 on which is mounted a receptacle 4, containing a cooling element, as for instance, water. The receptacle 4 is designed to receive a buffer 5 for cooling the same, as hereinafter fully described.

Mounted on the table 2 is a power shaft 6, the same being connected with the table or support 2 by suitable brackets or in any other desired manner. The shaft 6 is provided with a pulley 7 and receives power through a belt 8 from any desired source. The shaft 6 also carries a friction pulley 9 designed to engage a pulley 10 on which is mounted a shaft 11. The shaft 11 is guided by a bracket 12 and the table 2, and carries at its upper end a tumbler receiving support 13. On the support 13 is mounted a tumbler 14 for being engaged by the buffer 5 whenever desired. The buffer 5 is provided with a tubular member 15 clamped to an operating arm 16 by a set screw 17. The operating arm 16 is provided with a grip 18 at one end and at the opposite end with a loose or universal joint 20 which will permit the operating arm 16 to move in any desired manner. The joint 20 is connected with a suitable support 22 on the table 2 and acts as a fulcrum member when it is desired to press the buffer 5 against the tumbler 14. The buffer 5 in addition to having the tubular member 15, is provided with a channel-shaped member 23 for receiving a buffing plate 24 formed of wood or other desired material.

In order to hold the tumbler 14 rigidly on the support 13, a clamping member 25 is provided. The clamping member 25 is provided with anti-friction members 27 engaging a presser arm 28. The clamping member 25 is also provided with a retaining screw 29 which screws into the arm 28 for holding the clamping member 25 in place. In order to raise the clamping member 25 and the arm 28, the arm 28 is provided with a slide 32 fitting in a slideway 33 in upright 34. An extension 35 is provided which extends through a slot 36 in the upright 34, and is engaged by a pivotally mounted lever 37. The lever 37 is pivotally mounted at 38 upon the table 2, and has pivotally connected therewith a link 39 which is pivotally mounted at 40 to a foot treadle 41 pivotally mounted at 42 to the table 2. Preferably the foot of the operator is resting on the treadle 41 while he is manipulating the buffer 5 so that the tumbler will be positively clamped to the rotating rest 13.

In operation the treadle 41 is raised or is permitted to move upward, which will cause an upward movement of the clamping member 25 and associated parts. The tumbler then may be placed on the rest or

support 13, after which the treadle 41 is depressed until the clamping member 25 is pressed tightly against the bottom of the tumbler. The buffer 5 is then brought over and caused to bear against the tumbler while the same is rotating.

It will be evident that the buffer 5 may be made of different sizes and shapes and caused to buff any part of the tumbler, either on the inside or outside. It will also be evident that the buffer is adapted to operate upon tumblers having straight sides or having flaring sides, as desired. During the buffing operation the buffer often becomes undesirably heated, and in such cases the same may be swung around quickly and dipped in the water in the receptacle 4 and then again pressed against the tumbler.

The buffer may be caused to operate on a glass for any desired purpose, but is preferably used to merely polish the same.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. In a device of the character described, a supporting table, a rotating tumbler support, mounted on said table, means for rotating said tumbler support, means for clamping a tumbler on said tumbler support, a buffer arranged to engage said tumbler, a cooling receptacle arranged on said table, and a universally pivoted arm connected with said buffer for manipulating the same whereby the buffer may at one time be pressed against said tumbler and at another time move to a position within said cooling receptacle.

2. In a device of the character described, a rotating tumbler support, means for clamping a tumbler on said tumbler support, and mechanism for acting on said tumbler for buffing the same, said mechanism including a supporting standard, an arm connected to said standard by a universal joint, a sleeve adjustably mounted on said arm, said sleeve being formed with flanges extending at right angles to the direction of said arm, and a buffing block slidingly positioned in said flanges.

3. In a device of the character described, a rotating tumbler support, a presser member designed to be inserted and removed from a tumbler placed on said support for clamping a tumbler to said tumbler support and then releasing the same, a substantially longitudinally movable link connected with said presser member for actuating the same, a guide for guiding the movement of said link and said presser member, and a treadle mechanism for actuating said link.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES J. DENNING.

Witnesses:
JOHN SUTPHIN,
WILLIAM R. COOMBS.