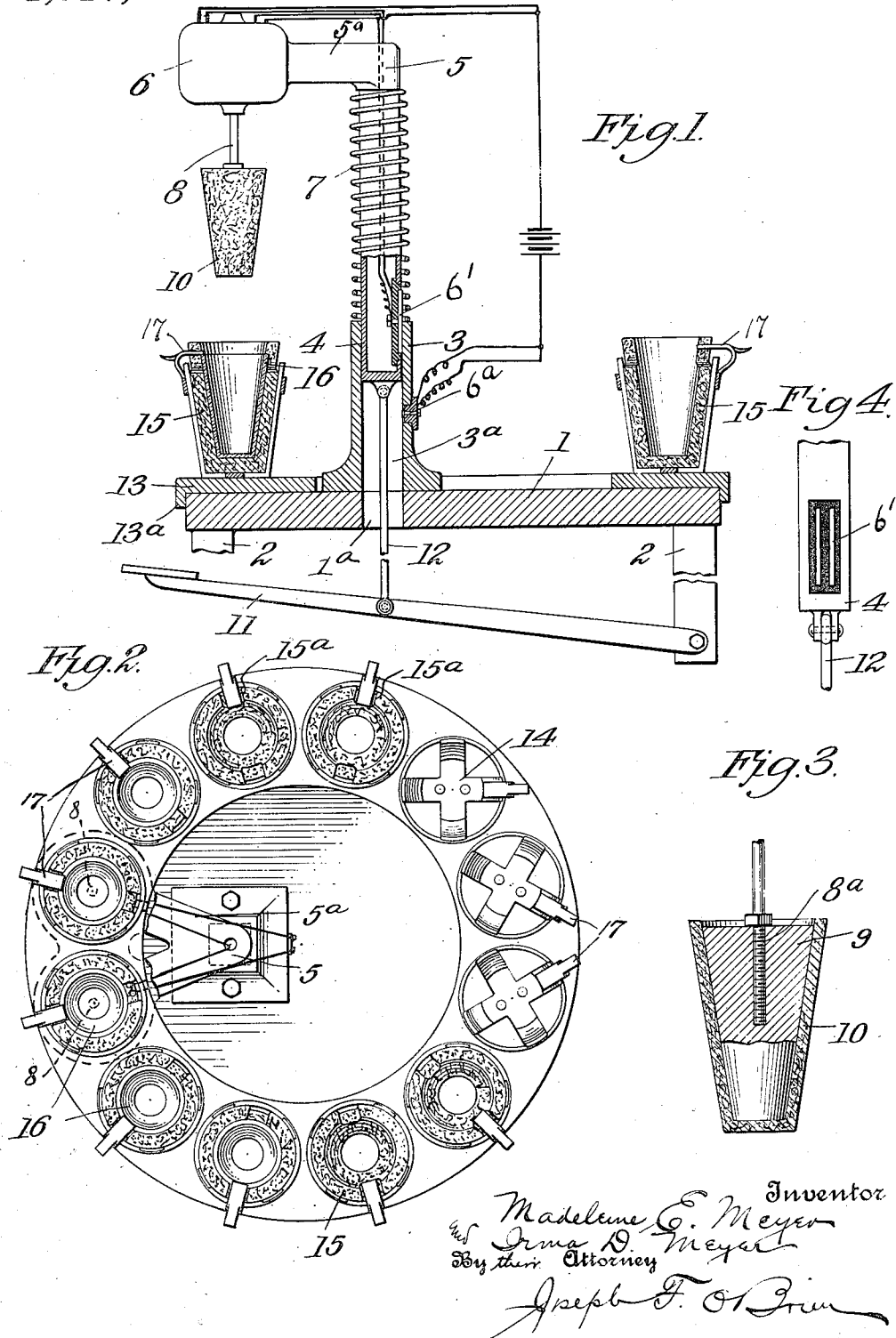


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MACHINE FOR DRYING AND POLISHING GLASSES.
APPLICATION FILED DEC. 21, 1916.

1,317,523.

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UNITED STATES PATENT OFFICE.

MADELEINE E. MEYER AND IRMA D. MEYER, OF NEW YORK, N. Y.

MACHINE FOR DRYING AND POLISHING GLASSES.

1,317,523.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, MADELEINE E. MEYER and IRMA D. MEYER, citizens of the United States, and residents, respectively, of the borough of Manhattan, city, county, and State of New York, have invented a certain new and useful Improvement in Machines for Drying and Polishing Glasses, of which the following is a specification.

This invention relates to improvements in machines for drying and polishing glasses.

By the use of our invention, we are enabled to simultaneously dry and polish the outer and inner surfaces of one or a plurality of glasses, and we are furthermore enabled to feed glasses to be dried and polished with great rapidity to the drying and polishing mechanism.

In the preferred embodiment of our invention, a series of holders, each provided with a removable drying cylinder, are mounted on a circular rotatable base, which in turn is suitably mounted to rotate upon a table or the like, so that a plurality of such holders may, by a simple operation of the operator, be turned into position in vertical alinement with vertically disposed rotatable shafts, mounted in plunger heads or arms, each of which is provided with a tapering block so that a plurality of glasses may be cleaned simultaneously. Each block preferably comprising a core of wood or other suitable material, and a covering of drying material such as absorbent or crape paper or felt, which is preferably readily detachable from the core, so as to permit the renewal thereof when same becomes soiled. The said shafts are preferably rotated by suitable electric motors mounted upon horizontal radiating arms which are connected with a common plunger. These arms are preferably retained in elevated position by means of a suitable spring, and are brought down by means of a suitable hand lever or foot pedal, suitable electrical connections being made between the plunger and an outer guiding casing or standard through which it moves to cause an electrical current to be supplied to the motors and the vertical shafts to be rotated.

In the accompanying drawings, in which similar reference characters designate corresponding parts throughout the several views,

Figure 1 is a vertical cross section partly

in elevation of a machine embodying our invention;

Fig. 2 is a plan view of the machine illustrated in Fig. 1, a part of the horizontal arms carrying motors being broken away;

Fig. 3 is a vertical section of the core and covering illustrated in Fig. 1;

Fig. 4 is a detailed view of the electrical connection between the plunger and suitable source of electrical energy.

Referring now to these drawings, 1 indicates a table top suitably supported by legs 2, and provided with an aperture 1^a. Mounted in any suitable manner upon said table, we provide a hollow standard or guiding casing having its interior guiding channel 3^a registering with the aperture 1^a in the table 1. Mounted within the guiding channel 3^a and adapted to be moved vertically therein is a hollow plunger 4, which is provided at its upper end with an elbow or bend 5 and horizontally disposed arms 5^a—5^b; at the outer end of each of which arms 5^a is mounted an electric motor 6. Each of the motors 6 are rotated by means of an electric connection extending through an arm 5^a and plunger 4, which has sliding contacts 6' for each motor engaging with contacts 6^a suitably disposed in the standard 3. The motors and plunger 4 are normally retained in elevated position by means of a spring 7, and the two sets of electrical contacts between the motors and source of supply are so arranged that when the plunger is moved downwardly the motors will rotate the shafts 8 having a screw threaded end 8^a on which is mounted a core of wood or the like 9, to which core is removably fastened a covering 10 of paper, felt or like material.

Suitable means is provided for pulling the plunger down against the action of the spring 7, and as shown, we provide a treadle 11 connected to the plunger 4 by means of the treadle rod 12.

The glasses are fed beneath the vertical shafts 8, preferably by means of a suitable circular feeding device which, as shown, comprises a circular carrier 13 provided with a depending flange 13^a which hugs the perimeter of the table 1, the said carrier being so mounted on the table as to permit a ready rotation thereof.

On the carrier 13, and suitably disposed in relation to each other, are a plurality of holders 14, preferably comprising vertically

extending metallic and resilient prongs within each of which holders is preferably removably mounted a drying cylinder which is adapted to fit the outer surface of the glass or the like, which it is desired to dry and polish. The cylinders 15 may be formed of crape paper, felt or other like material, or if desired there may be substituted for the cylinder any suitable drying and polishing medium. As shown, said cylinders are provided at their upper edges with suitable notches 15^a adapted to permit the gripping by the fingers of the operator of a glass which has been seated within such cylinders for the purpose of removing the same after cleaning and drying thereof. The holder is also preferably provided with a releasable spring clip 17 adapted to engage the top of the glass and prevent the lifting thereof by the tapering head.

As shown in Fig. 2, the plurality of glasses 16 are shown as seated in the cylinders 15, some of the said cylinders being shown empty and some of the holders 14 being shown without the cylinders mounted therein.

The operation of the device is as follows:

A series of the removable cylinders 15 are mounted within the holders 14, and glasses to be polished are then deposited or seated within such cylinders. A plurality of these holders are then turned into position in vertical alinement with the shafts 8 and the polishing device carried thereby. The treadle 11 is then depressed, bringing down the plunger and causing electrical connection with motors carried by the arms 5^a, whereupon the shafts 8 and their cleaning devices will first be rotated within the glasses 16. During this operation the glass may be retained against rotation by the fingers of the operator. So soon as the glass is dried and suitably polished on the inner surface the treadle may be further depressed and the glass released so as to permit it to be rotated in relation to the outer drying cylinder. When it has been sufficiently dried on the outer surface by such rotation, the plunger may be permitted to rise through the action of the spring 7, and the vertical shafts 8 carrying the removable cleaning devices may be withdrawn. The carrier may then be rotated to position another series of glasses, and the operation may be repeated.

Obviously, a plurality of glasses may in one operation be dried and polished on the exterior and interior surfaces thereof, and

a plurality of such glasses may be rapidly and quickly fed into position for repeated operations.

If desired, suitable means may be applied to the head to cause it to positively grip the glass and rotate the same in relation to the holder.

Having described our invention, we claim:

1. The combination with a plurality of glass holders, of a plunger and plunger guide, a plunger head carried by said plunger, a cleaning element mounted on said head and movable into operative relation with one of said glass holders, a motor also mounted on said head in operative connection with said cleaning element, electrical contacts on said plunger and guide, an electric circuit including said motor and contacts and means for normally retaining said contacts out of contacting position.

2. The combination with a plurality of glass holders, of a plunger and plunger guide, a plunger head carried by said plunger, a cleaning element mounted on said head and movable into operative relation with one of said glass holders, a motor also mounted on said head in operative connection with said cleaning element, electrical contacts on said plunger and guide, an electric circuit including said motor and contacts, means for normally retaining said contacts out of contacting position and a treadle for depressing said plunger and making contact between said electrical contacts.

3. The combination with a plurality of glass holders, of a plunger and plunger guide, a plurality of plunger heads carried by said plunger, cleaning elements mounted on said heads and each movable into operative relation with one of said glass holders, a motor also mounted on each of said heads in operative connection with each of said cleaning elements, electrical contacts for each of said motors on said plunger and guide, electric circuits including said motors and contacts and means for normally retaining the said plunger in elevated position with the contacts separated.

In witness whereof, we have signed our names to the foregoing specification in the presence of two subscribing witnesses.

MADELEINE E. MEYER.
IRMA D. MEYER.

Witnesses:

STALLO VINTON,
LILLIAN KAPLAN.