O. SORCI.

GLUING MACHINE.

APPLICATION FILED AUG. 2, 1919.

1,371,942. Patented Mar. 15, 1921.

FIG. 1.

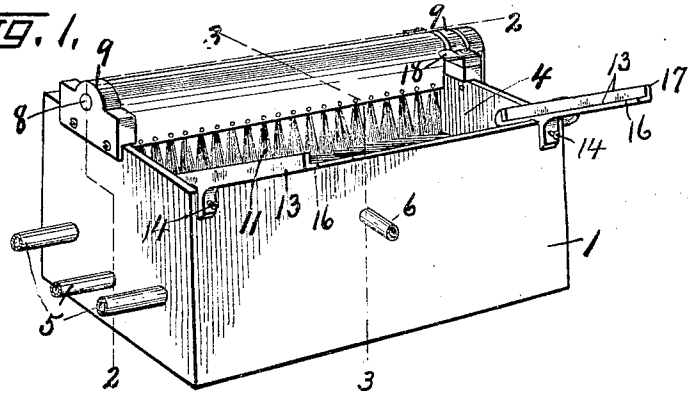


FIG. 2.

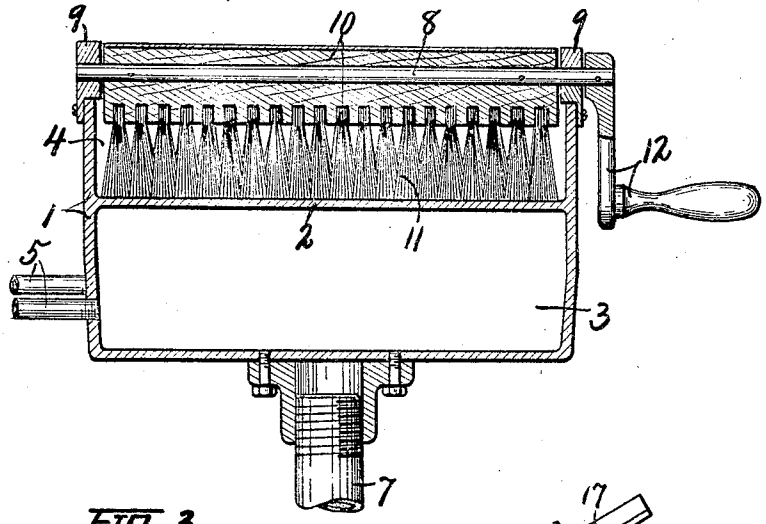
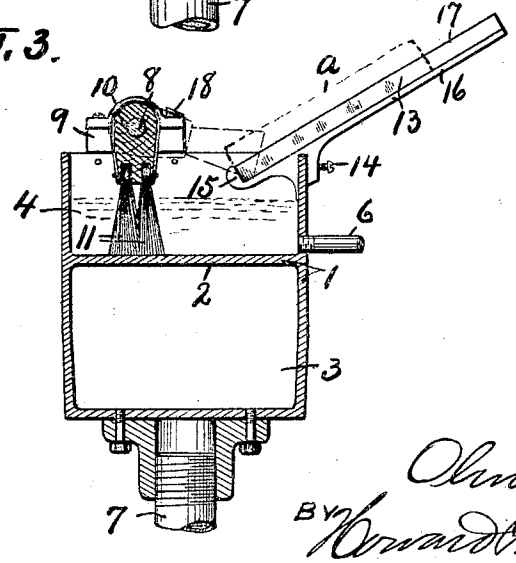


FIG. 3.



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GLUING-MACHINE.

1,371,942. Specification of Letters Patent. Patented Mar. 15, 1921.

Application filed August 2, 1919. Serial No. 314,915.

To all whom it may concern:

Be it known that I, OLINTO SORCI, of Canastota, in the county of Madison, in the State of New York, have invented new and useful Improvements in Gluing-Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to certain improvements in gluing machines adapted to be used more particularly by cabinet makers for applying glue to the edges of wooden parts which are to be glued together.

The main object is to render the work of gluing the edges of cabinet pieces more expeditious and uniform and at the same time to avoid waste of the glue by supporting the wooden piece in such a position relatively to the glue containing vat that any excess glue which may be applied to the edge thereof will fall back into the vat.

The other objects and uses relating to specific parts of the device will be brought out in the following description.

In the drawings:—

Figure 1 is a perspective view of a gluing machine embodying the various features of my invention.

Fig. 2 is a longitudinal vertical sectional view of the same taken on line 2—2, Fig. 1.

Fig. 3 is a transverse vertical sectional view taken on line 3—3, Fig. 1.

As illustrated, this gluing machine comprises a substantially rectangular box-like vat or container —1— divided horizontally some distance from the top and bottom by partition —2— to form lower and upper compartments —3— and —4—.

The lower compartment serves as a heating chamber and is adapted to receive steam or hot water through one or more circulating pipes —5— which may be connected to any available source of supply for hot water or steam to keep the chamber —3— in a heated condition, particularly while the machine is in use.

The upper compartment —4— is open at the top and forms a reservoir in which a suitable quantity of glue is maintained and to which water may be added as required through a pipe —6—.

The entire receptacle may be supported in any suitable manner as, for example, centrally upon a standard —7— a portion of which is shown in Figs. 2 and 3. A rock shaft—8— is journaled in suitable bearings —9— upon the opposite ends of the vat —1— or chamber —4— and upon this shaft is secured a brush —10— to rock therewith, the bristles as —11— of said brush, being extended into the compartment —4— so as to wipe in a straight line across or in close proximity to the upper face of the partition —2—. The shaft —8— and its brush —10— are adapted to be rocked forward and backward by means of a hand crank —12— which is secured to one end of said shaft at the outside of the vat —1—.

The arc of movement of the brush is preferably limited to approximately 90° or from a vertical position to nearly a horizontal position into and out of the liquid glue indicated by the dotted line in Fig. 3.

A pair of guide brackets —13— are mounted in spaced relation upon the upper edge of one side of the vat —1— and are adjustable toward and from each other and held in their adjusted position by set screws —14— for receiving and supporting the wooden pieces, as —*a*—, the edges of which are to receive the glue. These guide brackets extend inwardly and outwardly beyond the corresponding faces of the adjacent wall of the vat to which they are secured and are preferably inclined upwardly from their inner ends so as to support the pieces to be glued in a similar inclined position, the lower rear edges of said braces being provided with stop shoulders or abutments —15— against which the edge of the piece to be glued rests while the main body is supported upon the remaining portions of the braces. These stop shoulders are within the arc of movement of the free ends of the bristles —11— of the brush —10— and are disposed in a plane substantially parallel to the axis of movement of said brush so that when the latter is rocked from its vertical position toward the horizontal position, as shown by dotted lines in Fig. 3, the free ends of the bristles —11— will convey the glue from the compartment —4— to the lower rear edge of the piece —*a*— to be glued with a wiping motion and owing to the fact that the glued edge is within the compartment —4— it is evident that any excess glue which may be applied thereto will fall back into said compartment to avoid waste. The abutments —15— are relatively narrow lengthwise of the machine so as to expose practically the entire length of the edge to be glued to contact with the brush.

It is customary to glue large numbers of similar pieces in succession and in order that they may be properly supported during the gluing operation, they are provided with ledges —16— projecting toward each other from the upright guide flanges as —17— which latter are spaced to correspond approximately to the length of the board to be glued so that by placing such board upon the upper ends of the brackets, it may be slid downwardly and rearwardly toward the brush until it engages the abutments —15— whereupon the handle —12— is rocked to bring the brush in contact with the adjacent edge of the board after which the brush and handle are allowed to return to their normal positions.

This movement of the brush to the work is limited by a stop —18— which is secured to one of the bearings —9— and projects into the path of the main body or back of the partition at one side of its axis of movement as shown more clearly in Figs. 1 and 3.

What I claim is:—

1. A gluing device comprising a vat having a horizontal partition some distance from the bottom and top of the vat dividing the latter into lower and upper compartments, means for heating the lower compartment, the upper compartment being adapted to contain a quantity of liquid glue, a brush journaled in the opposite ends of the upper compartment for rocking movement into and out of the liquid glue, means for operating the brush, a pair of brackets adjustable one in relation to the other along and upon the upper edge of one side of the vat for supporting the article to be glued with a portion thereof in the path of movement of the brush.

2. A gluing device of the character described, the combination of a vat having a heating chamber and a liquid glue containing chamber, a brush journaled on the vat to move about an axis lengthwise of the vat and having its bristles movable into and out of the liquid glue, a pair of brackets adjustable along and upon the upper edge of one side of the vat and extending into the glue containing chamber for supporting the article to be glued with a portion thereof in the path of movement of said bristles.

3. In a gluing machine the combination with a substantially rectangular glue-containing receptacle, a brush movable in the receptacle about an axis parallel with one of the lengthwise sides thereof, guide brackets for the article to be glued extending downwardly and inwardly across the upper edge of said one of the sides of the receptacle, and secured thereto in an inclined plane, said brackets having stops at their inner ends disposed in a plane substantially parallel with the axis of movement of the brush for limiting the downward and inward movement of the article to be glued toward the brush, said stops being within the arc of movement of the glue-applying portions of the brush to cause the glue to be applied edgewise of said article adjacent to and between the stops as the brush moves about its axis.

4. A gluing machine comprising a glue containing receptacle, a guide for the work to be glued inclining upwardly and outwardly from the interior of the vat across the upper edge of one side of the receptacle and provided with stop shoulders wholly within the vat against which the edge of the article to be glued may rest, a brush mounted on the vat to swing across the inner edge of said article when resting against said stops, and means for operating the brush.

In witness whereof I have hereunto set my hand this 22 day of July, 1919.

OLINTO SORCI.

Witnesses:
JAMES TELLER,
SAM MURPHY.