W. GARDNER.

MACHINE FOR APPLYING GLUE OR PASTE TO VENEERS.

No. 248,731. Patented Oct. 25, 1881.

Fig. 1.

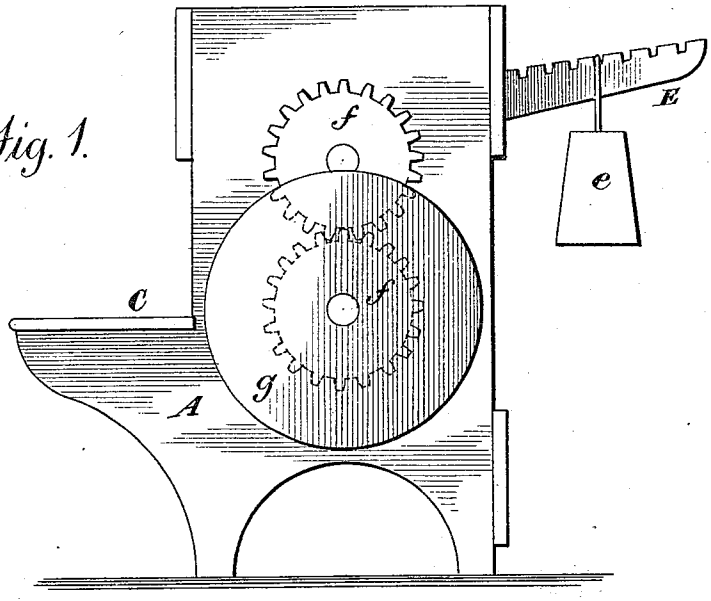


Fig. 2.

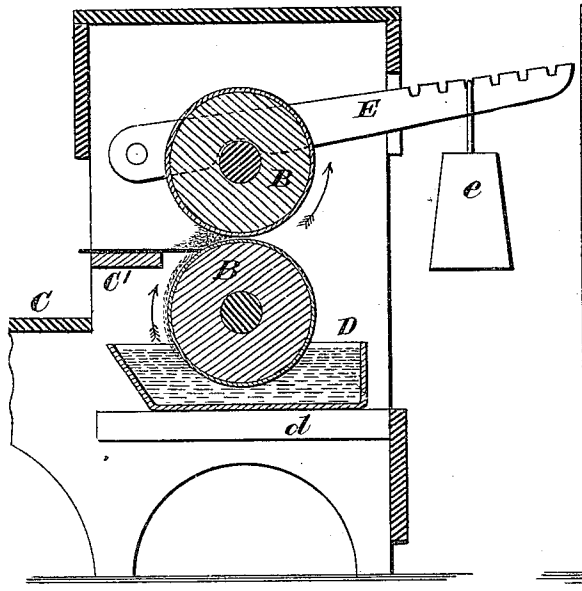
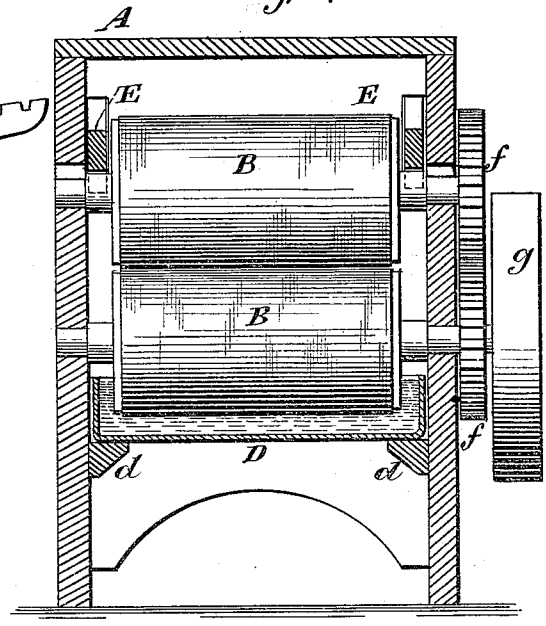


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM GARDNER, OF NEW YORK, N. Y.

MACHINE FOR APPLYING GLUE OR PASTE TO VENEERS.

SPECIFICATION forming part of Letters Patent No. 248,731, dated October 25, 1881.

Application filed April 4, 1879.

To all whom it may concern:

Be it known that I, WILLIAM GARDNER, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Machines for Applying Glue or Paste to Veneers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a side view of my improved machine particularly adapted for applying paste or glue to sheets of veneer. Fig. 2 is a vertical transverse section of the same, and Fig. 3 is a longitudinal section thereof.

Corresponding parts in the several figures are denoted by like letters.

This invention relates to certain improvements in machines particularly adapted for applying paste or glue to veneers, &c.; and it consists in the employment of two or more rolls, with their surfaces covered with some suitable material for the better application of the glue or paste, and arranged one above the other, with their axes or shafts under pressure and driven by suitable mechanism, substantially as hereinafter more fully set forth.

In the accompanying drawings, A refers to a suitable inclosure or receptacle, within which the rolls B B are hung, one arranged above the other. The surfaces or faces of these rolls are covered with some material that will enable the better application of the glue or paste—as, for instance, textile material, which will sufficiently absorb the paste or glue to prevent its too quick escape therefrom, and thus permit the application of the paste or glue retained upon the rolls to the interposed passing veneer.

My device will operate with uncovered rolls, but not so satisfactorily.

A table or platform, C, is affixed to the front of the machine, to afford a means of support, or a rest, upon which the veneer or board or material is passed to and between the glue or paste applying rolls B B.

D is a vat or reservoir for holding glue or paste, arranged underneath the lower roll and supported upon cleats or flanges *d d* upon the inside of the receptacle A. The glue or paste is of such consistency that it will be carried up from the vat D to the bite of the rolls, and at that point a sufficient quantity will accumulate to insure the proper coat of glue to the upper roll when the veneer is passing through the rolls. By this arrangement of pasting or gluing rolls it will be observed that the interposed passing veneer or board will be treated to a coat of glue or paste upon both sides—a great desideratum in the treatment of veneers, particularly in its manufacture into seats, seat-backs, &c.

Notched levers E, with suspended weights *e*, may be hung to the inside of the receptacle A, bearing upon the shafts or shaft of the upper roll, to put the said roll under pressure, to effect the thorough application of the glue or paste to the interposed passing veneer or board. The same effect may be produced by the employment, in connection with the shaft of the said upper roll, of springs or screws.

Upon the projecting ends of the shafts of the rolls B B are engaging-pinions *f f*, and upon the still farther projecting end of the shaft of the lower roll is the driving pulley or wheel *g*, around which is passed a belt or band connecting with a motor for operating the machine. It may be operated by hand, if desired, by the attachment to the wheel or pulley *g* of a crank or handle.

In practice the glue in the vat or vats is heated by steam in coils of pipe arranged in proximity therewith. Other means of heating the glue may, however, be used.

In practice I arrange a table or platform, C′, at a point above the table C and slightly below the top of the lower roll B, to permit the feeding of the veneer to the said roll so that as it meets the roll with its supply of glue or paste it will, by the time it reaches the entrance between the two rolls, cause an accumulation of the glue or paste, which accumulation or excess of glue will facilitate the application of the same by the upper roll to the upper side of the veneer.

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

1. The process herein described of gluing

both sides of a veneer at one operation, which consists in forcing a veneer under a quantity of glue accumulated at the bite of oppositely-revolving rolls and then feeding the said veneer between the rolls, whereby the accumulated glue is forced back upon the upper surface of the veneer by the upper roll, and the lower side of the veneer is treated by the constantly-ascending supply from the lower roll, as specified.

2. The combination, with the feed and gluing rolls, substantially as herein shown and described, of the feeding-shelf arranged below the upper surface of the lower roller, whereby the article to be glued can be pushed under glue accumulated at the bite of the rolls, substantially as shown and described.

3. The combination, in a gluing or pasting machine, of the rollers B B, covered with textile material, with the glue-receptacle D, feeding-shelf C′, and automatically-adjusting levers E, substantially as set forth.

4. A gluing or pasting machine consisting of the frame A, having shelves C C′, receptacle D, canvas-covered rollers B B, having engaging-pinions *f f*, driving-wheel *g*, and weighted levers E *e*, substantially as shown and described.

5. The combination, in a gluing or pasting machine having two textile-covered rolls, one being arranged directly over the other in adjustable bearings, of a receptacle of glue or cement in which the lower roller turns, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM GARDNER.

Witnesses:
DAVID THORNTON,
ALEXANDER P. KETCHUM.