(No Model.)

E. DENSMORE.

GLUING MACHINE.

No. 347,329. Patented Aug. 17, 1886.

Fig. 1.

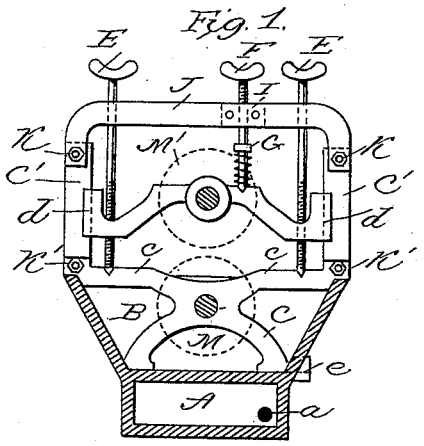


Fig. 2.

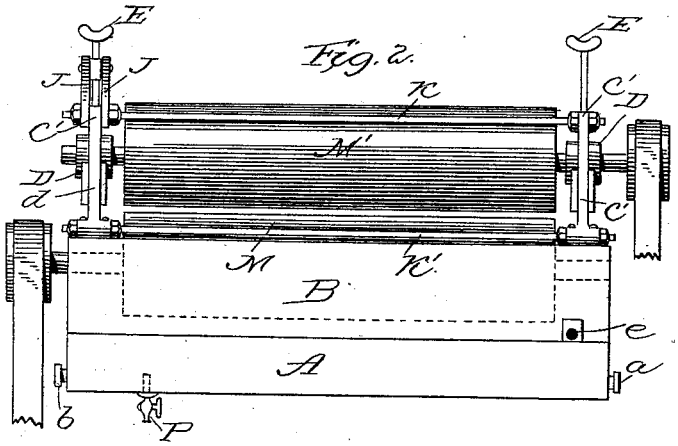
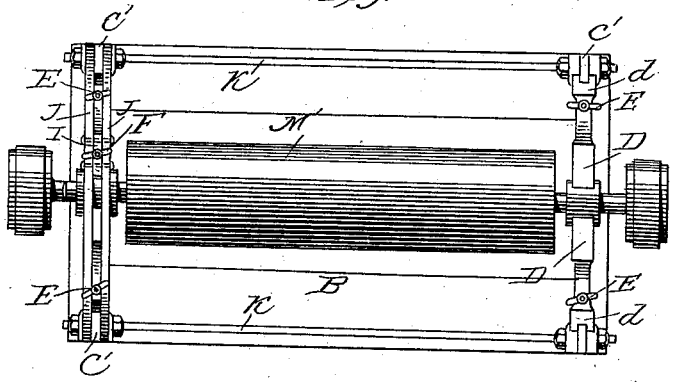


Fig. 3.



Attest
C. Walter Duncan
F. L. Middleton

Inventor:
Edwin Densmore
by Joyce & Spear
Attys.

UNITED STATES PATENT OFFICE.

EDWIN DENSMORE, OF GRAND RAPIDS, MICHIGAN.

GLUING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 347,329, dated August 17, 1886.

Application filed January 13, 1886. Serial No. 188,464. (No model.)

To all whom it may concern:

Be it known that I, EDWIN DENSMORE, of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and useful Improvement in Machines for Applying Glue to Veneers; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improved machine for applying glue to veneers.

The object of the invention is to provide a simple and efficient apparatus for the purpose, combined with mechanism for adjusting the apparatus to different thicknesses of the material to be coated.

In the accompanying drawings, Figure 1 represents an end view of the apparatus, with the lower part or tank in cross-section. Fig. 2 is a side elevation, and Fig. 3 is a plan view, of the apparatus.

The apparatus has a base consisting of a tank or reservoir, B, for the glue, and under this a steam-heating chamber, A, with pipe-connections *a b* and drain-pipe P. The glue-reservoir is open above and has a drain-passage, *e*. In each end of the reservoir is a frame, C, having arms *c*, extending laterally, and in this frame are the bearings for the journals of the lower roller, M. Uprights C′ C′ are connected to the frames C by means of rods K′ K′, which also connect the frames of one end to those of the other, and these are connected at each end by cross-pieces J. The cross-pieces J are connected to the uprights by means of the rods K K, which also run from end to end of the apparatus, and connect the entire end frames with each other.

Between the uprights C′ C′, and extending across from side to side, are yokes D D. The ends embrace the uprights and slide thereon. In these yokes are the bearings for the journals of the upper roller, M′. Rods E E, adapted to be turned by hand, are threaded through these yokes, and the lower ends of these rods rest on the arms *c* of the lower frames. The rods serve to separate the rollers and determine their distance from each other. Other rods, F, one at each end, are threaded in the cross-pieces of the upper frames, and have collars G below their threaded bearings, and coiled springs, which the collars press upon the yokes. Thus the springs hold down the yokes, and therewith the upper rollers are pressed upon the lower or upon the veneer with uniform pressure, whether the rollers are separated to a greater or to a less extent, for thicker or for thinner stuff.

The rollers are covered with carpeting or with any fabric having a suitable nap. The reservoir is supplied with glue, which is kept warm by the heat imparted by the steam below it. The lower roller takes up the glue and applies it directly to the under side of the veneer passed through between the rollers. The veneers are usually supplied to the rollers in pieces, and, as the rollers run constantly, the lower roller applies the glue to the upper in the intervals between the application of successive pieces of veneer. In case it be desired to coat veneers of considerable length from rolls, a second glue-tank can be placed above the upper roller and glue applied therefrom to said roller.

I am aware that it is not new to pass veneers and fabrics between rollers to supply glue and other coatings, and also that it is not new to provide a fixed distributing-roller and a vertically-adjustable roller above the same for this purpose.

I claim as my invention—

1. In a machine for applying glue to veneers and like forms, in combination, a glue-reservoir, a roller in fixed bearings therein, an upper roller, rods threaded in the bearings of the upper roller, whereby it may be adjusted in relation to the lower roller, said rods resting at their lower ends upon the frame, and pressure devices for the bearings of said upper roller, substantially as described.

2. In combination with the reservoir, the frames C C, and lower roller, the uprights C′ C′, connected thereto and to each other, the yokes D D, supporting the upper roller, the threaded rods E, for adjusting the yokes, and the threaded rods F F, seated in the frame with springs for applying pressure to the yokes upon the same, substantially as described.

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

EDWIN DENSMORE.

Witnesses:

F. L. MIDDLETON,

CHAS. L. STURTEVANT.