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F. W. DOVE

GLUING ATTACHMENT FOR VENEER TAPING MACHINES

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Fig. 1.

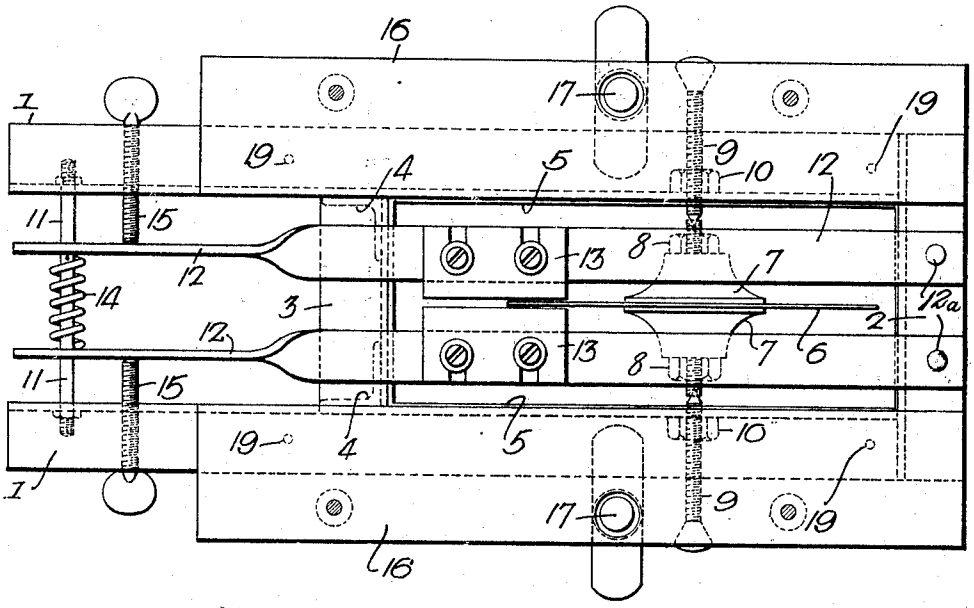
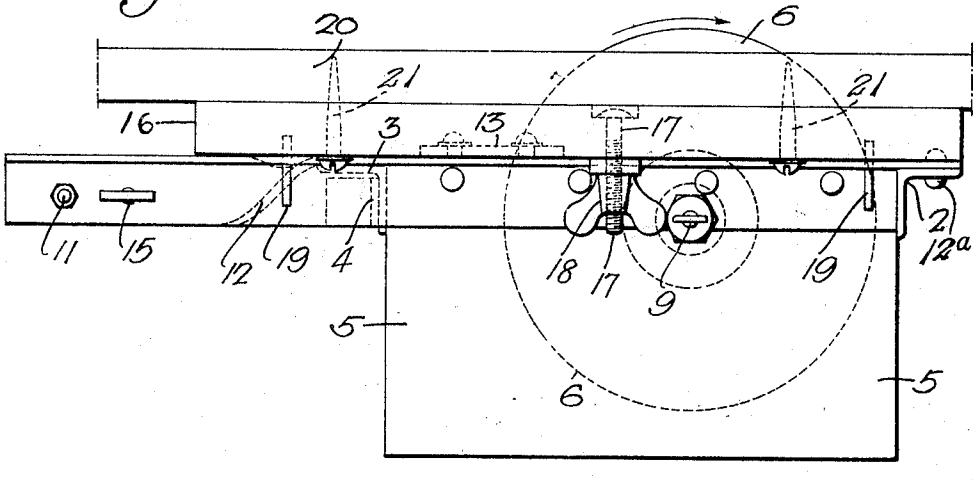


Fig. 2.



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UNITED STATES PATENT OFFICE.

FREDERICK W. DOVE, OF LUDINGTON, MICHIGAN.

GLUING ATTACHMENT FOR VENEER-TAPING MACHINES.

Application filed April 10, 1922. Serial No. 551,389.

To all whom it may concern:

Be it known that I, FREDERICK W. DOVE, a citizen of the United States, residing in Ludington, Michigan, have invented a Gluing Attachment for Veneer-Taping Machines, of which the following is a specification.

The object of this invention is to provide a gluing device for veneer taping machines whereby glue may be applied to the edges of the veneer strips prior to their being taped.

In the attached drawing:

Figure 1 is a plan view of an embodiment of my device in the form of an attachment for standard taping machine, and

Fig. 2 is a side elevation of the attachment.

In making veneer panels by the usual method, the veneer is first jointed to get a smooth and true joint at the edge, and the strips required to make a panel of the required width then run through the taping machine, in which gummed tape is applied at the joints to hold the strips together. Following the application of the tape, it has hitherto been necessary to fold the veneer back at the joints, and to apply glue to the joints with a brush or in some other fashion, after which the veneer was laid with the taped side down to bring the joints into close contact while the glue is drying. This process is at best a time-consuming one, and where the panel is composed of a number of thin strips it is apt to be an awkward one.

In the present invention, I have provided means whereby the veneer may be glued prior to the application of the tape, thereby accomplishing the complete process in a single continuous operation and avoiding the necessity of laying open the strips after the taping in order that they may be glued.

With reference to the drawings, my device in its present embodiment comprises a frame structure consisting of a pair of parallelly disposed angle bars 1, 1, which bars are spaced apart and held together by an angular cross bar 2 at one end, and by a second cross bar 3 attached to the bars 1, 1, intermediate their ends, the bar 3 being secured to the inner vertical webs of the bars 1, 1, by means, in the present instance, of short angle brackets 4, 4.

Suspended between the cross bars 2 and 3 and the side bars 1, 1, is an open topped tank or container 5, while rotatably mounted between the two bars 1, 1, and extending down into the container 5 is a circular thin disk 6, the said disk in the present instance being mounted between hub elements 7, 7, upon a spindle 8. The ends of the spindle 8 are recessed, and the pointed ends of a pair of set screws 9, 9, oppositely mounted in the bars 1, 1, extend into the said recesses and constitute bearings for the said disk, nuts 10, 10, upon the set screws 9 constituting means for retaining the said screws in place.

Supported at one end upon the cross bar 2 and at the other end upon a rod 11 which extends between and is secured in the bars 1, 1, are a pair of elements 12, 12, which elements extend substantially parallel to the bars 1, 1, at each side of the disk 6. Adjustably secured to each of the elements 12, 12, is a scraper 13, the edges of which scrapers lie close to the opposite sides of the disk 6, and provide means for removing excess material adhering to the disk. The ends of the elements 12 are pivoted at 12^a to the cross bar 2 and are movable on the rod 11, and carried by the said rod and interposed between the ends of the elements is a spring 14 tending to keep the ends of the said elements separated, there being also provided at this end of the bars a pair of set screws 15, 15, mounted in the bars 1, 1, which act as stops limiting the outward movement of the ends of the said elements 12, 12. By means of these set screws, it is apparent that the elements 12, 12, may be adjusted to give any clearance that may be desired between the scrapers and the disk.

Secured to the top flanges of the bars 1, 1, I have shown in the present instance a pair of wooden members 16, 16, said members being held to their respective bars by means of bolts 17, 17, upon which are wing nuts 18. Dowels 19 are also provided for maintaining the members in proper position. The members 16, 16, provide means for attaching the frame structure to a taping machine or to other supporting structure.

As shown in Fig. 2, the device in the present instance is adapted to be attached to the under side of the table 20 of a taping machine, as by means of screws 21, the disk 6 extending upwardly through a suitable slot or opening in the table and projecting slightly above the top thereof.

In operation, the container 5 is partially

filled with a suitable glue, in which the disk 6 is partially immersed. The strips of veneer in being fed to the taping machines are passed one on either side of the disk 6 so that their edges bear against it, the disk by reason of the frictional engagement with the strips being rotated in the direction indicated by the arrow in Fig. 2. The contact between the edges of the veneer and the disk causes the said edges to be coated with glue, and these edges, when the veneer strips are passed into the taping machine, are brought together and taped in the usual manner.

It will be apparent that with this device, after the veneer strips are taped together there is no necessity for spreading the edges for the purpose of gluing, since the glue is applied prior to the taping, it being only necessary to set the veneer panels to one side to dry. There results a material saving in time and in the cost of manufacturing the veneer panels.

Considerable modification is possible with no departure from the essential features of the invention.

I claim:

1. An adhesive-applying device comprising a slotted table, a container for adhesives secured below said slot, and a rotary disk extending into the container and projecting through the slot above the top of said table, the top of the table being unobstructed to permit movement of two objects to be secured together across said table in engagement respectively with the opposite faces of said disk whereby an adhesive is applied to those faces of the objects which abut when the objects are brought together.

2. An adhesive-applying device comprising a slotted table, a container for adhesives secured below said slot, and a freely rotatable disk extending into the container and projecting through the slot above the top of said table, the top of the table being unobstructed to permit movement of two objects to be secured together across said table in engagement respectively with the opposite faces of said disk whereby an adhesive is applied to those faces of the objects which abut when the objects are brought together.

3. The combination with a slotted table, of a container established below the slot, a vertical rotary disk mounted within the container and projecting upwardly through the said slot, a pair of horizontally pivoted arms extending along opposite sides of said disk below the table, resilient means at the free ends of said arms limiting their movement toward each other, adjustable means limiting the movement of said free ends away from each other, and scraper elements secured to said arms in operative relation to the opposite sides of said disk.

4. The combination with a slotted table, of a container established below the slot, a vertical rotary disk mounted within the container and projecting upwardly through the said slot, a pair of horizontally pivoted arms extending along opposite sides of said disk below the table, resilient means at the free ends of said arms limiting their movement toward each other, adjustable means limiting the movement of said free ends away from each other, and scraper elements adjustably secured to said arms and adapted to be held in operative relation to the opposite faces of the said disk.

5. A gluing attachment adapted to be applied as a unit to veneer taping machines and the like and comprising a pair of spaced longitudinal side pieces, means for securing said side pieces together, a container for an adhesive suspended from said side pieces, a vertical rotary disk journaled in said side pieces and extending into said container, a pair of adjustable scraper elements mounted respectively on opposite sides of said disk, and means for securing said attachment to a supporting structure.

6. A gluing attachment comprising two longitudinal elements, cross pieces securing said elements in spaced relation, a container suspended from said elements, a vertical rotary disk journaled in said elements and extending into the container, said disk also projecting above the said elements, a pair of arms pivotally secured to one of said cross pieces and extending longitudinally of the latter one on each side of said disk, adjustable means controlling the positions of the free ends of said arms, and scraper elements secured to said arms in operative relation with the opposite faces of said disk.

7. In a gluing attachment, the combination with two longitudinal elements, of cross pieces securing said elements in spaced relation, a container suspended from said elements, a vertical rotary disk journaled in said elements and extending into said container, said disk also projecting above said elements, a pair of longitudinal arms pivotally secured to one of said cross pieces and movable in substantially horizontal planes about said pivots, said arms extending on opposite sides of said disk and having each an aperture in its free end, a rod secured to said longitudinal elements and extending through said apertures to support the free ends of said arms, a spring on said rod intermediate the ends of said arms, set screws in the said longitudinal elements adapted to engage the outer faces of said arms, and scraper elements secured to said arms in operative relation to the opposite faces of said disk.

8. In a gluing attachment, the combination with two longitudinal elements, of cross pieces securing said elements in spaced relation, a container suspended from said

elements, a vertical rotary disk journaled in said elements and extending into said container, said disk also projecting above said elements, a pair of longitudinal arms pivotally secured to one of said cross pieces and movable in substantially horizontal planes about said pivots, said arms extending on opposite sides of said disk and having each an aperture in its free end, a rod secured to said longitudinal elements and extending through said apertures to support the free ends of said arms, a spring on said rod intermediate the ends of said arms, set screws in the said longitudinal elements adapted to engage the outer faces of said arms, and scraper elements adjustably secured to said arms in operative relation to the opposite faces of said disk.

FREDERICK W. DOVE.