July 16, 1929. A. SZIBORR 1,720,803

MACHINE FOR UNITING VENEER PLATES

Filed March 17, 1927

Fig. 1.

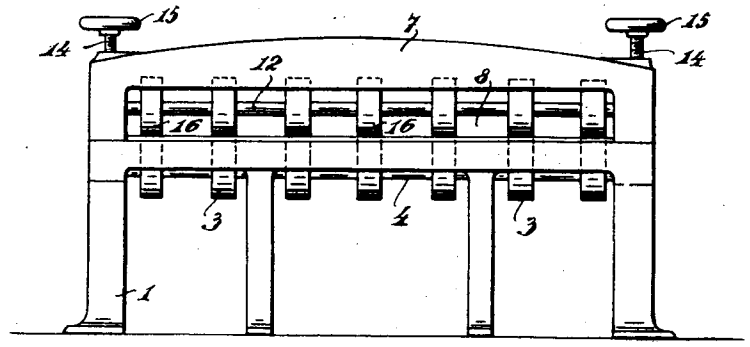
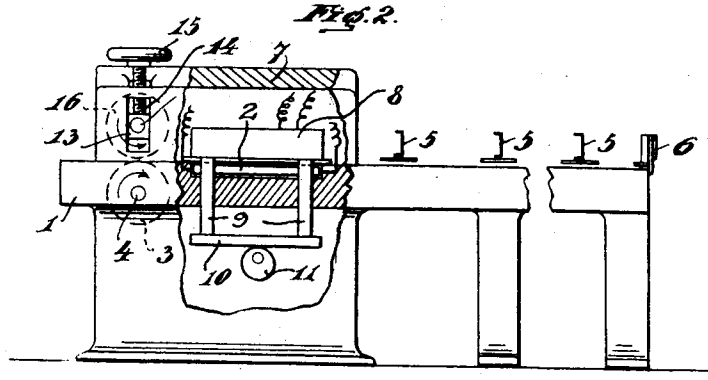


Fig. 2.



Inventor:
A. Sziborr
By: Marks & Clerk
Attys.

Patented July 16, 1929. 1,720,803

UNITED STATES PATENT OFFICE.

AUGUST SZIBORR, OF REHFELDE, NEAR BERLIN, GERMANY, ASSIGNOR TO THE FIRM: J. BRÜNING & SOHN AKTIEN-GESELLSCHAFT, OF POTSDAM, NEAR BERLIN, GERMANY.

MACHINE FOR UNITING VENEER PLATES.

Application filed March 17, 1927, Serial No. 176,263, and in Germany January 20, 1927.

This invention relates to a machine for uniting veneer in which the gluing of joints is effected in a direction at right angles to that of the feed.

Machines of this kind are known in which the single plates are fed by feed rollers and pressed together during the gluing. The union in this case takes a relatively long time and the pathway, on which the single plates are glued together, must have a great length to assure a duration of time sufficiently long for the union to be effected.

In this system the working-power of the assistant controlling the machine cannot be used sufficiently as the time required for proper gluing does not allow a higher rate of working.

Machines are also known in which the gluing is effected by heated pressure plates that is to say is quickly performed. The single plates are, however, in this case not fed by rollers but by hand. At the beginning of the gluing two attendants and with increasing length of the work-piece at least three attendants are required, as the long plate at the one side of the machine cannot be guided by one man. The disadvantage of this mode is therefore to be seen in the first instance in the fact that on account of the raised number of attendants the costs for effecting the union become too high for which reason the machine does not work economically.

All these disadvantages are removed by the new machine which requires one attendant only. Any practically possible rate of working in a continuous process may be obtained with this machine.

A machine according to the present invention is shown diagrammatically by way of example in the accompanying drawing forming part of the specification and in which Fig. 1 is a front view and Fig. 2 a side view of the device shown in Fig. 1 parts being broken away and parts being shown in cross-section.

The lower part 1 of the machine is formed as a table upon which the glued plates are fed. In the front part of the table is fixed a plate 2 heated by electricity or in any other suitable manner over which the single veneer plates are moved. Furthermore in the front part of the table a shaft 4 is journalled upon which are fixed the lower rollers 3. Above the part 1 beams 5 are arranged at suitable distances which serve the purpose of holding down the glued up plate. At the end of the table a cutting device is arranged by means of which the plate is cut to the desired length.

The upper part of the machine is a bridge-like body 7 in which is arranged the upper weighted heating plate 8 situated above the lower heating plate 2. The heating plate 8 is vertically adjustable in the body 7. The movement of the heating plate 8 is effected by four rods 9 actuated by a cross member 10 and an eccentric disc 11. Journalled in the bridge 7 is also the shaft 12 which is carried by the vertically adjustable bearings 13. These bearings 13 are adjusted by the spindles 14 provided with the hand wheel 15. Fixed upon the shaft 12 are the upper pressure- and feed rollers 16 driven in known manner by toothed wheels which in turn are driven by a suitable source of power.

The new machine operates as follows:

The single plates suitably prepared for the gluing together are introduced from the front part between the rollers 3 and 16 which are adjusted to correspond with the thickness of the plates. As soon as the first glue joint is disposed under the heated plates 2 and 8 the attendant cuts out the feed rollers and lowers the upper heating plate 8 by correspondingly turning the disc 11. At this moment the binding of the material put on the plates is effected. The attendant then raises the heating plate 8 by correspondingly turning the disc 11 and again puts into operation the feed rollers 3 and 16. The glued up plates are advanced until the succeeding glue joint comes under the heating plates and the cycle of operation is repeated. As shown in Fig. 2 the veneer material shown between the plates 8 and 2 is a part of a continuous strip at this specific location.

The plate is now continuously fed and the beams 5 slightly pressed down serve as a guide. The cutting device at the end of the table, which may be influenced from the front part of the machine, is actuated as soon as the plate has the desired length. Behind the table 1 either an ordinary table of equal height or a table swingable around a horizontal axis may be arranged which

allows a series of finished plates to be stocked.

The bridge-like upper part 7 of the machine may, for the purpose of cleaning, repairing and the like, be raised in a similar manner as the upper heating plate.

The operation of the feed-and pressure rollers and the heating plates may be made kinematically dependent upon each other without departing from the spirit of the invention.

What I claim is:

1. In a veneer press the combination of a table, feed and pressing rollers at one edge of said table, means for adjusting said rollers with respect to each other, pressing means located on said table beyond said rollers comprising upper and lower heated plates between which the veneer material passes from the feed rollers, the upper plate acting as a weight to compress the material therebetween, means for raising and lowering the upper plate, and a plurality of guide bars disposed above said table to prevent warping of the veneer during the pressing operation.

2. In a veneer press as claimed in claim 1 in which the means to raise the upper heated plate comprises post members engaging said plate, a plate connecting said post members and an eccentric engaging said last mentioned plate whereby movement of the eccentric raises said first mentioned plate through said last mentioned plate and the post members.

In testimony whereof I affix my signature.

AUGUST SZIBORR.