

J. H. CLEMONS & J. W. BOWER.

No. 312,433.

Patented Feb. 17, 1885.

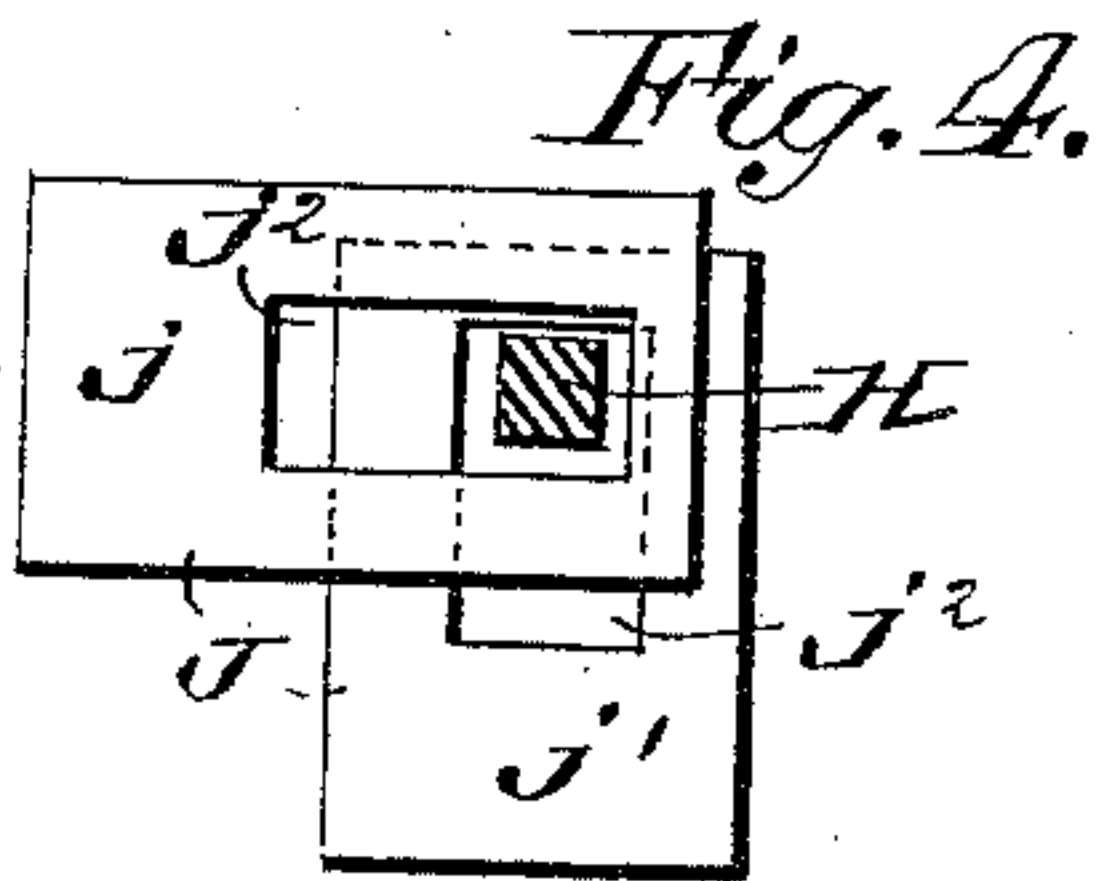
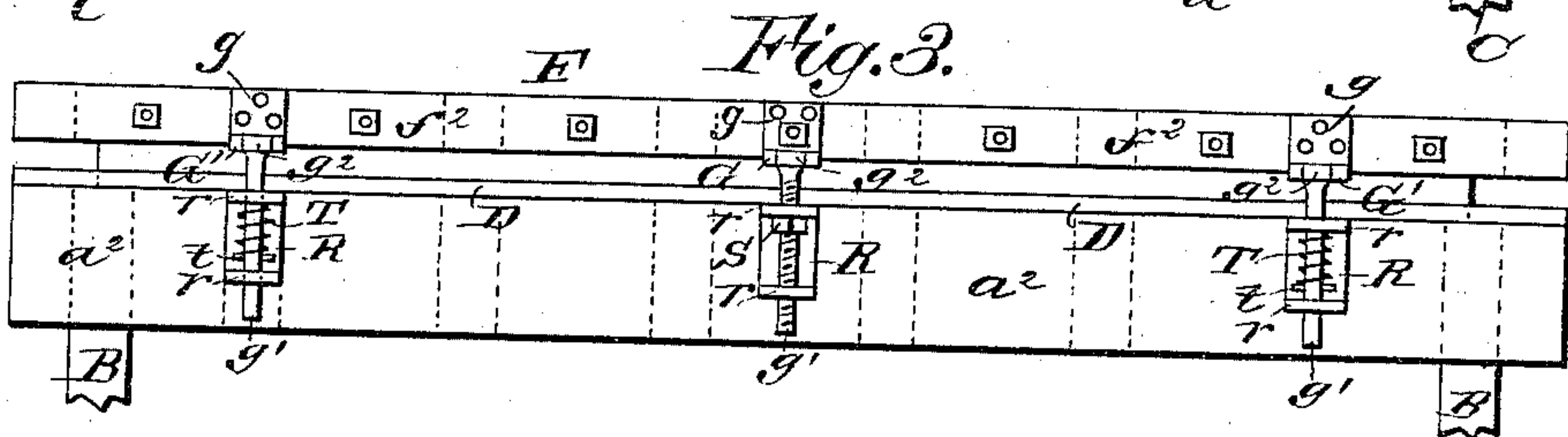
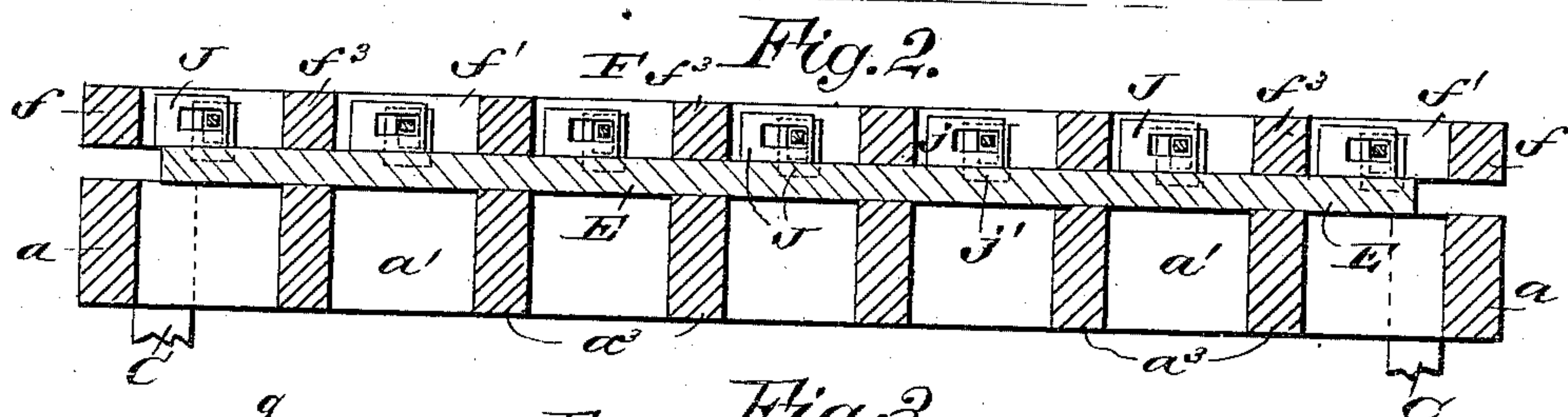


Fig. 5.

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GLUING-TABLE.

SPECIFICATION forming part of Letters Patent No. 312,433, dated February 17, 1885.

Application filed September 23, 1884. (No model.)

To all whom it may concern:

Be it known that we, JAMES H. CLEMONS, of Dolgeville, in the county of Herkimer and State of New York, and JOSEPH W. BOWER, of Stratford, in the county of Fulton and State of New York, have invented a new and Improved Gluing-Table, of which the following is a full, clear, and exact description.

The object of our invention is to economize time and labor in the gluing together of strips or pieces of wood to form sounding-boards, table-tops, or other finished work.

The invention consists in a gluing-table constructed with a bed-frame to receive the work, a clamp-frame held above the bed-frame and provided with one or more rods or bars carrying series of presser plates or washers adapted to be swung to one side as each successive glued strip or piece is to be clamped to place, and means for pressing the plates to the work.

The invention includes, also, special constructions of the gluing-table with the clamp-frame hinged to the bed-frame, and so as to be adjusted therefrom to suit work of varying thicknesses, and also in particular constructions and combinations of parts of the gluing-table, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of our improved gluing-table as applied to use. Fig. 2 is a cross-section taken on the line xx , Fig. 1, drawn to a larger scale and partly broken away. Fig. 3 is a rear end view of the table partly broken away. Fig. 4 is a cross-section through one of the washer or presser plate rods, showing, also, the different positions of the plates; and Fig. 5 is an enlarged sectional plan view of one of the screw-head blocks of the table.

The letter A indicates the bed-frame of the gluing-table, which we prefer to make of side pieces, a , front and rear end pieces, a' a'' , and intermediate longitudinally-ranging pieces or stringers, a^3 , suitably fastened together and supported on rear legs, B, and longer front legs, C, so that the table-top stands on a down-

ward incline, making it more convenient to use, as hereinafter described. Across the table-bed frame, at or near the rear end, we fasten securely the strip or foot-plate D, made preferably of metal, and against which the first board, E, is laid, said plate D receiving the pressure applied to the successive boards as they are glued and laid together edge to edge, as shown in Fig. 1, for making sounding-boards, table-tops, or a variety of work from narrow strips or boards edge-jointed together to prevent warping or twisting of the work by changes of temperature.

The letter F indicates the upper part or clamping-frame of the gluing-table, said frame having side bars, f , front and rear bars, f' f'' , and intermediate longitudinal bars, f^3 , framed together suitably, and hung by hinges G G' to the rear end of the bed A. The bars f f' f'' f^3 of the clamping-frame by preference coincide with or lie directly over the bars or pieces a a' a'' a^3 , respectively, of the main top or bed of the table when in use, the clamping and bed frames F A being counterparts of each other in this respect, the frame F, however, being shallower or lighter in construction.

Between the bars f^3 , and in the rear cross-bar, f'' , of the frame F, we support the rear ends of the rods H, the forward parts, h , of which are passed into the clamp-blocks I at the front end of the table. We prefer to make the rods H square in cross-section between the bars f' f'' of the frame F, and also at h , where the rods enter the blocks I, and we prefer to fasten the rods in or hold them to the rear cross-bars, f'' , by nuts f^4 , screwed onto the reduced rear ends of the rods outside of said cross-bars, as shown, whereby the rods H and blocks I will be held against turning axially.

On each of the rods H are placed a number of washers or presser-plates, J, which are forced forward toward the blocks I by springs K, placed on the rods at their back ends. The extreme front ends, h' , of the rods H are round, to enter the bores of tubular screw-heads L, which are threaded into nut-plates M, firmly bolted at m m , or otherwise secured to the front cross-bar, f' , of the clamp-frame, so that as each screw-head L is turned in by a wrench or lever, N, the inner ends, l , of the head will force the respective clamp-block I and the cor-

responding series of washers or plates, J, inward or backward to the work, and as each successive strip or board E is glued ready to be clamped to the one last laid on the table and glued fast the screws L will be loosened by turning them backward in the nut-plates M, and as many of the plates or washers J as together correspond in thickness to the width of the board or strip to be glued fast will be swung upward to either side of the rods H to the position shown at *j* in Fig. 4, and the plate J of each rod H then coming at or in front of the back edge of the strip, or those in the position shown at *j'*, Fig. 4, will serve as the presser-plates, to be forced forward by the screw-heads L again to clamp the work, as will readily be understood. The plates or washers J have suitable slots or openings, *j*², allowing them easily to be swung upward on the rods H as may be required. We make the rods or bars H with flat upper surfaces, the better to support the presser-plates J in the two positions above described.

Any suitable hook or other catches, O, may be provided to hold the clamp-frame F down to the bed-frame A at the front end of the table, and we propose to connect a cord, P, at that end to the table and pass it over suitable overhead pulleys, *p*, and suspend a weight, Q, therefrom, so that the weight will act when the catches O are unlatched to swing the clamp-frame F upward on its hinges G G' to allow the successive strips or boards E to be placed against each other in gluing the work, or to remove the glued work from the machine. The hinges G G' consist each of a plate, *g*, and a bar or rod, *g'*, pivoted together to form the knuckle-joint *g*². The rods *g'* of the hinges are guided in the flanges *rr* of plates R, fixed to the rear cross-pieces, *a*², of the bed-frame A. The rod *g'* of the center hinge, G, is screw-threaded to receive a nut, S, which may be set at any point along the rod, and the rods *g'* of the side hinges, G G', have springs T, placed on them above pins *t*, fixed in the rods, so that the springs act to lift the nut S of the hinge G against the upper flange, *r*, of its plate R. It is evident that by adjusting the nut S higher or lower on its rod *g'* the hinging points or axes of the hinges G G' will be shifted accordingly to allow the presser plates J to take the proper relative positions parallel with the bed-frame A for action upon work of different thicknesses as the frame F is lowered.

The gluing-table may be made of any de-

red size, and may have any preferred number of presser-plate-carrying rods or bars H, as the work to be done may require.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A gluing-table constructed with a bed-frame to receive the work, and a clamp-frame held above the bed-frame and provided with one or more rods or bars carrying a series of presser-plates or washers to be swung to one side, and means for pressing the plates to the work, substantially as shown and described.

2. A gluing-table constructed with a bed-frame, a clamp-frame hinged to the bed-frame, and said clamp-frame having one or more rods or bars carrying series of presser-plates to be swung to one side, and means for pressing the plates to the work, substantially as shown and described.

3. A gluing-table constructed with a bed-frame, a clamp-frame hinged to the bed-frame and adjustable at the hinges to and from the bed-frame and said clamp-frame being provided with one or more rods or bars carrying series of presser-plates to be swung to one side, and means for pressing the plates to the work, substantially as shown and described.

4. The combination, in a gluing-table, of the work-bed A, clamp-frame F, provided with rods or bars H, carrying presser-plates J, the head-blocks I, screws L, and nuts M, substantially as shown and described.

5. The clamp-frame F, constructed with rods or bars H, carrying presser-plates J, to be swung upward, as specified, and said rods H, having flat upper surfaces, substantially as shown and described.

6. In a gluing-table, the combination, with the work-bed A, provided with the flanged plates R, secured to one end thereof, and the clamp-frame F, of the hinges G', having the rods *g'*, passing through the flanges of the plate R, and provided with the springs T, surrounding the same, and the hinge G, having the screw-threaded rod *g'*, passing through the flanges of the said plate R, and provided with the nut S, substantially as herein shown and described.

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Witnesses:

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