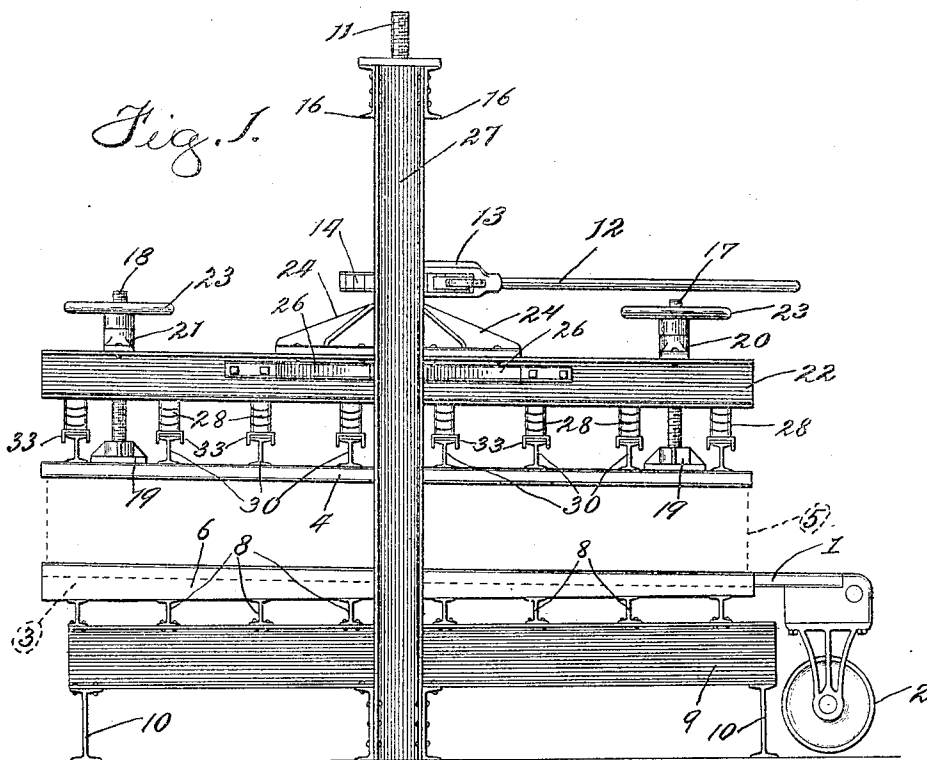
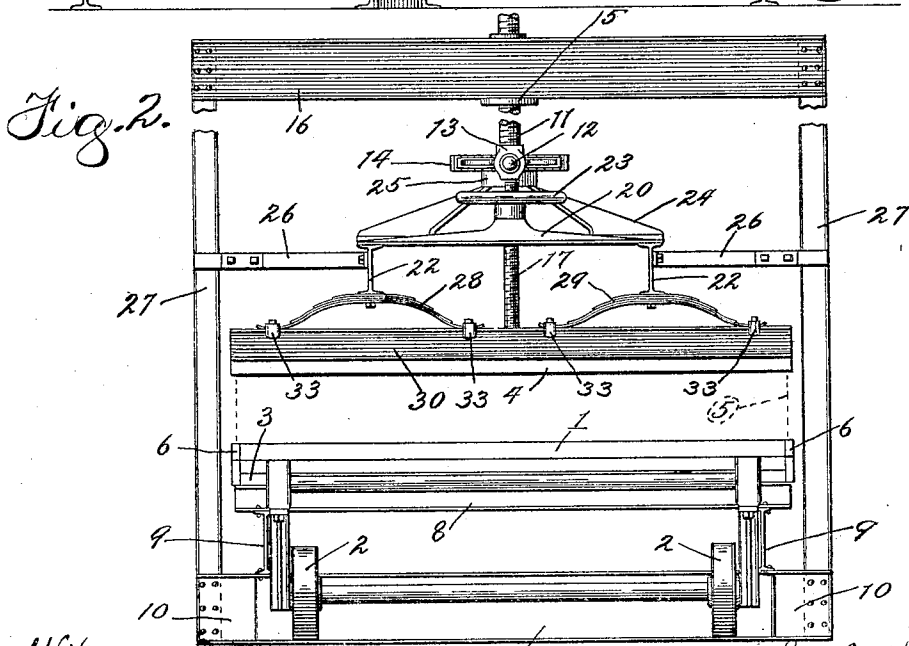


M. JUNGEL.
VENEER PRESS.

APPLICATION FILED NOV. 28, 1904.

3 SHEETS—SHEET 1.



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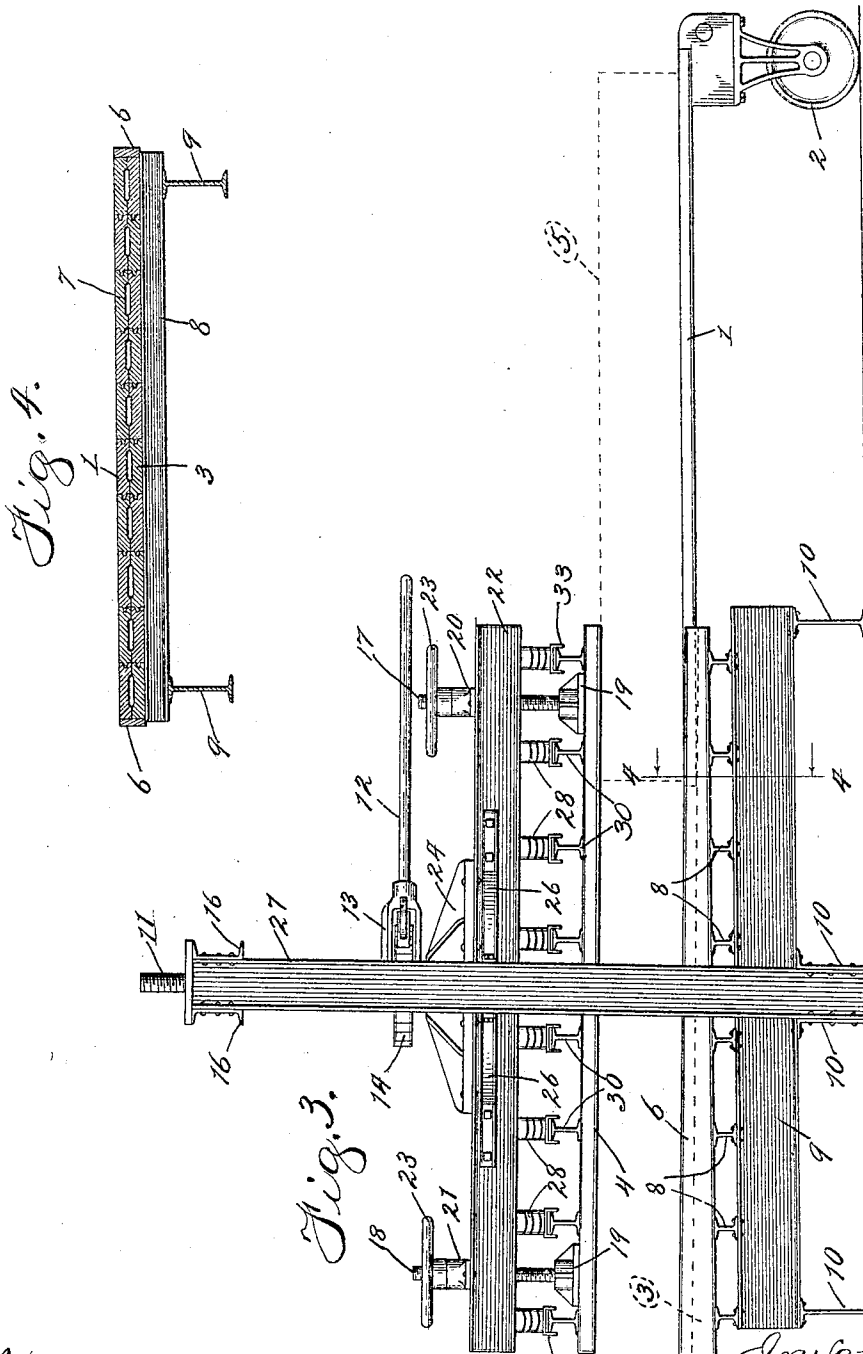
No. 823,175.

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3 SHEETS--SHEET 2

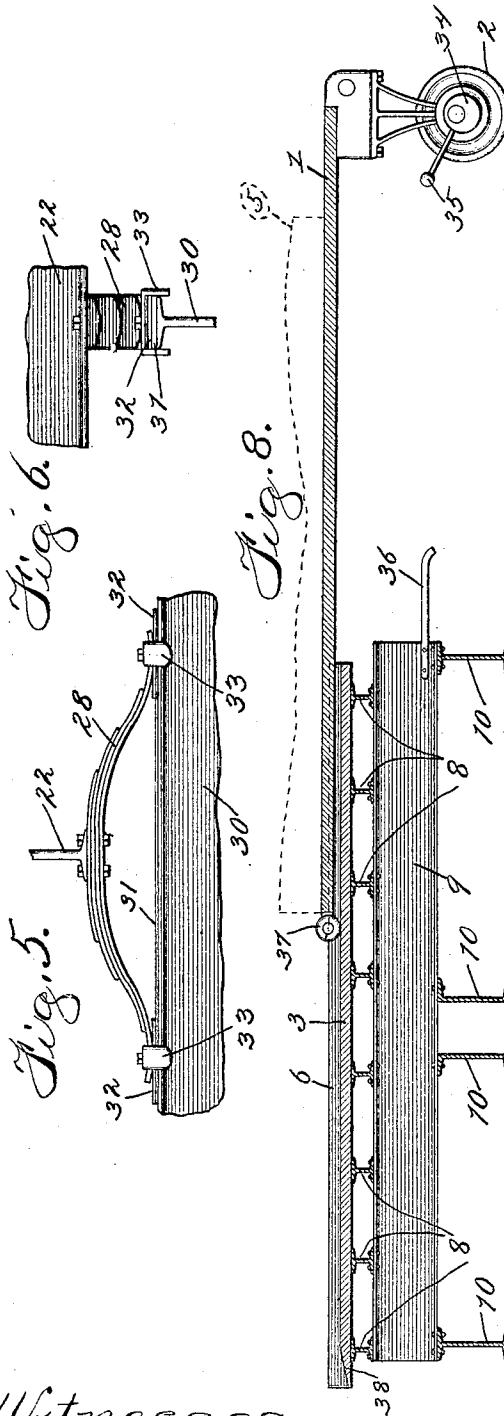
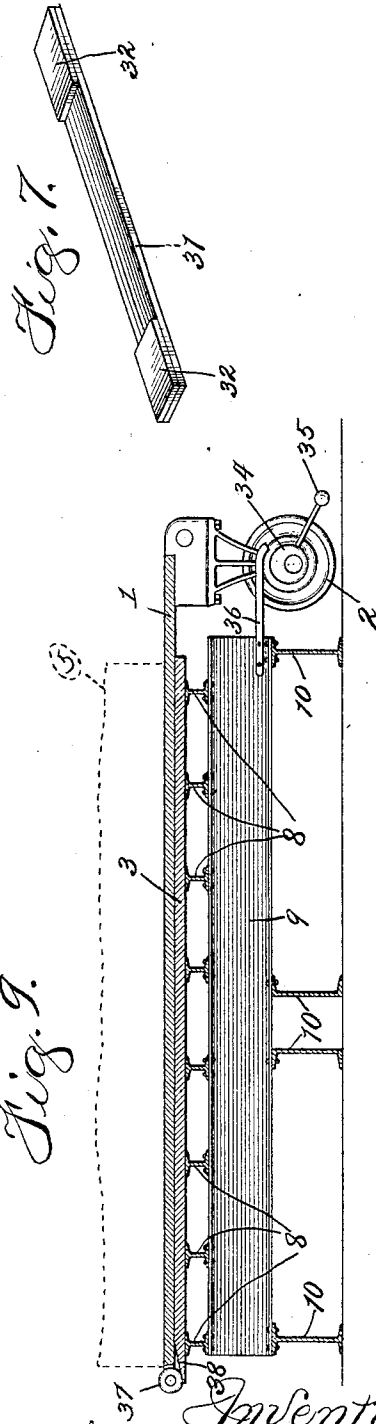


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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

MICHAEL JUNGEL, OF CHICAGO, ILLINOIS.

VENEER-PRESS.

No. 823,175.

Specification of Letters Patent.

Patented June 12, 1906.

Application filed November 28, 1904. Serial No. 234,510.

To all whom it may concern:

Be it known that I, MICHAEL JUNGEL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Veneer-Presses, of which the following is a full, clear, and exact specification.

My invention relates to that class of presses more generally used for pressing the veneers while the glue is hardening; but it is also designed for pressing or holding other material and for other purposes; and it has for its primary object to provide improved and efficient means whereby large pieces or a great quantity of such material at one time may be readily introduced under the press and withdrawn therefrom.

A further object of my invention is to provide improved means whereby the pressure at various points throughout the bed of the press may be varied at will, so that in the event the material does not cover the entire bed the ends of the top plate will not be bent downwardly at the ends of the material.

In order to accomplish the foregoing objects and certain other objects which will hereinafter appear, I employ certain features of novelty which comprise the invention and which will first be described with reference to the accompanying drawings and then more particularly pointed out in the claims.

In the said drawings, Figure 1 is a side elevation of my improved press. Fig. 2 is a front view thereof, partly broken away. Fig. 3 is a view similar to Fig. 1, showing the truck withdrawn. Fig. 4 is a cross-section of the bed on the line 4 4, Fig. 3. Fig. 5 is a detail side elevation of one of the springs and pressure-increasing bar, showing the manner in which it is used. Fig. 6 is an end view thereof. Fig. 7 is a detail perspective view of the pressure-increasing bar. Fig. 8 is a side elevation of the lower part of the press and truck, showing a modification hereinafter described with the truck partially withdrawn; and Fig. 9 is a similar view showing the truck introduced.

The material to be introduced into the press is placed upon a truck comprising a platform 1 and supporting-wheels 2, which, however, support only one end of the platform, while the other end of the platform is supported directly upon the bed 3 of the press and slides therealong, and the truck is pulled out or pushed in beneath the usual top plate

4. The material in the various figures of the drawings is represented by the dotted lines 5, and in Fig. 3 the truck is shown partially withdrawn with the material supported thereon preparatory to being introduced, while in Fig. 1 it is shown inserted with the material introduced between the bed and the top plate

4. The platform 1, however, serves as the direct support for the material upon the bed 3 during the pressing operation, and in order that the wheels of the truck may be relieved of pressure at this time means are provided whereby they will no longer be in contact with the floor when the truck is in its inner position. In the exemplification of the invention shown in Figs. 1, 2, and 3 this is accomplished by making or arranging the bed 3 on an incline with the highest part remotely situated with relation to the wheels of the truck, so that when the truck is fully inserted the wheels will be raised from the floor, as shown in Figs. 1 and 9, the end of the inclined bed contiguous to the wheels being slightly higher than the distance between the bottom of the platform 1 and the lower edges of the wheels, so that the wheels do not contact with the floor at all during the slight portion of the concluding part of the truck's inward travel; but as soon as the truck is pulled outwardly a slight distance the weight is borne by the wheels, and movement thereof is thereby facilitated.

The platform 1 slides on the bed 3 between side guides or flanges 6, and in order to reduce friction and also to admit air between the top of the bed 3 and the bottom of the platform 1, and thereby avoid warping of the platform, the opposed faces of these two members are provided with matched grooves 7, extending longitudinally of the boards of which they are composed, as shown in Fig. 4.

The bed 3 is supported directly upon a plurality of cross I-bars 8, and these take their support upon longitudinal I-beams 9, which are in turn supported upon cross-sills 10, or any other suitable foundation for the bed may be employed.

11 is the central main screw, which may be provided with any suitable operating-lever 12, having well-known ratchet connection 13 with a ratchet-wheel 14 for turning the screw in the nut 15, fixed to overhead cross-bars 16, and thereby raising and lowering the top plate 4. The top plate is supported at its ends by two independent supplemental screws 17 18, which have their lower ends

provided with swiveled connection 19 of any suitable form with the top plate, while their upper ends pass loosely through cross-bars 20 21, respectively, supported upon two longitudinal I-beams 22, the upper ends of the screws 17 18 above the cross-bars 20 21 being provided with hand-wheels or nuts 23, threaded thereon and taking their support directly upon the cross-bars 20 21, so as to suspend the top plate 4 at its ends from these cross-bars. The longitudinal beams 22 are secured to a central cross-bar or support 24, having a boss 25, in which the lower end of the main screw 11 is rotatably secured or swiveled in the usual way, so that when the screw 11 is rotated the cross-bar 24, together with the beams 22, the screws 17 18, and the top plate 4, suspended thereby, will be raised and lowered, the beams 22, and consequently all parts connected therewith, being guided in these movements by guides 26, secured to the sides of the longitudinal beams 22 and embracing the side standards 27 of the press.

The downward pressure of the main screw 25 is communicated to the top plate 4 through the intermediary of a plurality of leaf or semi-elliptic springs 28 29, arranged in two series, one series under each of the beams 22, and one pair of the springs 28 29 of each series being supported upon one of a series of cross I-beams 30, which are supported directly upon the top plate 4, and thus impart the pressure of the main screw 11 uniformly to the work 5 upon the bed 3. In many instances, however, it is desirable to vary the pressure of the springs 28 29 at different places in the length or the width of the top plate—as, for example, where the work does not cover the entire bed—thus leaving the edges of the top plate where they project beyond the work unsupported and liable to be bent an objectionable extent or subjected to the same degree of pressure as the part upon the work. In order to accomplish this variation in the pressure, therefore, I employ a number of removable bars or strips 31, the detail of one of which is shown in Fig. 7, having enlargements 32 at their ends adapted to be inserted between the springs and their respective beams 30 inserted or withdrawn accordingly as it is desired to increase or decrease the pressure at that point. In order that the bars 31 may better remain in place, the ends of the springs are formed or provided with downwardly-projecting lips or guides 33, which embrace both the beams and the bars.

The bed 3 being on an incline and it being desirable that the pressure be transmitted directly at right angles to the face of the bed, the standards 27 are also inclined, as shown in Figs. 1 and 3, and that of course determines a corresponding inclination in the other parts of the superposed structure.

In the modification shown in Figs. 8 and 9 the bed 3^a is level, and to provide for the removal of the wheels 2 from the floor they are mounted upon eccentric journals 34, provided with a handle 35, which when turned raises the wheels from the floor, and, if desired, this handle may be so set, as shown in Fig. 8, as to be pushed over the center automatically by a projection 36 when the truck is forced home. The inner end of the truck, if desired, may be provided with an anti-friction-roller 37 for supporting it during its travel, and when in position for pressure the roller 37 passes down an incline 38 on the bed 3, and thereby allows the platform 1 to settle firmly upon the bed.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A press for the purpose described comprising side standards, overhead cross-bars secured to the standards, a nut fixed to the cross-bars, a central main screw working in the nut, a support in which the lower end of the main screw is swiveled, longitudinal beams suspended from the support, a top plate, cross-beams secured upon the top plate, series of leaf-springs secured in pairs to the cross-beams and suspended from the longitudinal beams, cross-bars mounted upon the ends of the longitudinal beams, supplemental screws working in the cross-bars, and swivel connections whereby the ends of the top plate are suspended from the supplemental screws.

2. A press for the purpose described comprising a support, longitudinal beams suspended from the support, a top plate, cross-beams secured upon the top plate, series of leaf-springs each having depending end lips embracing the cross-beams, and suspended from the longitudinal beams, and removable strips having enlargements at their ends and inserted between the springs and cross-beams and retained in position by the depending end lips.

MICHAEL JUNGEL.

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