J. J. MEYERS.

SELF FEED SAWING MACHINE.

APPLICATION FILED MAR. 18, 1914.

1,241,871.

Patented Oct. 2, 1917.

6 SHEETS—SHEET 1.

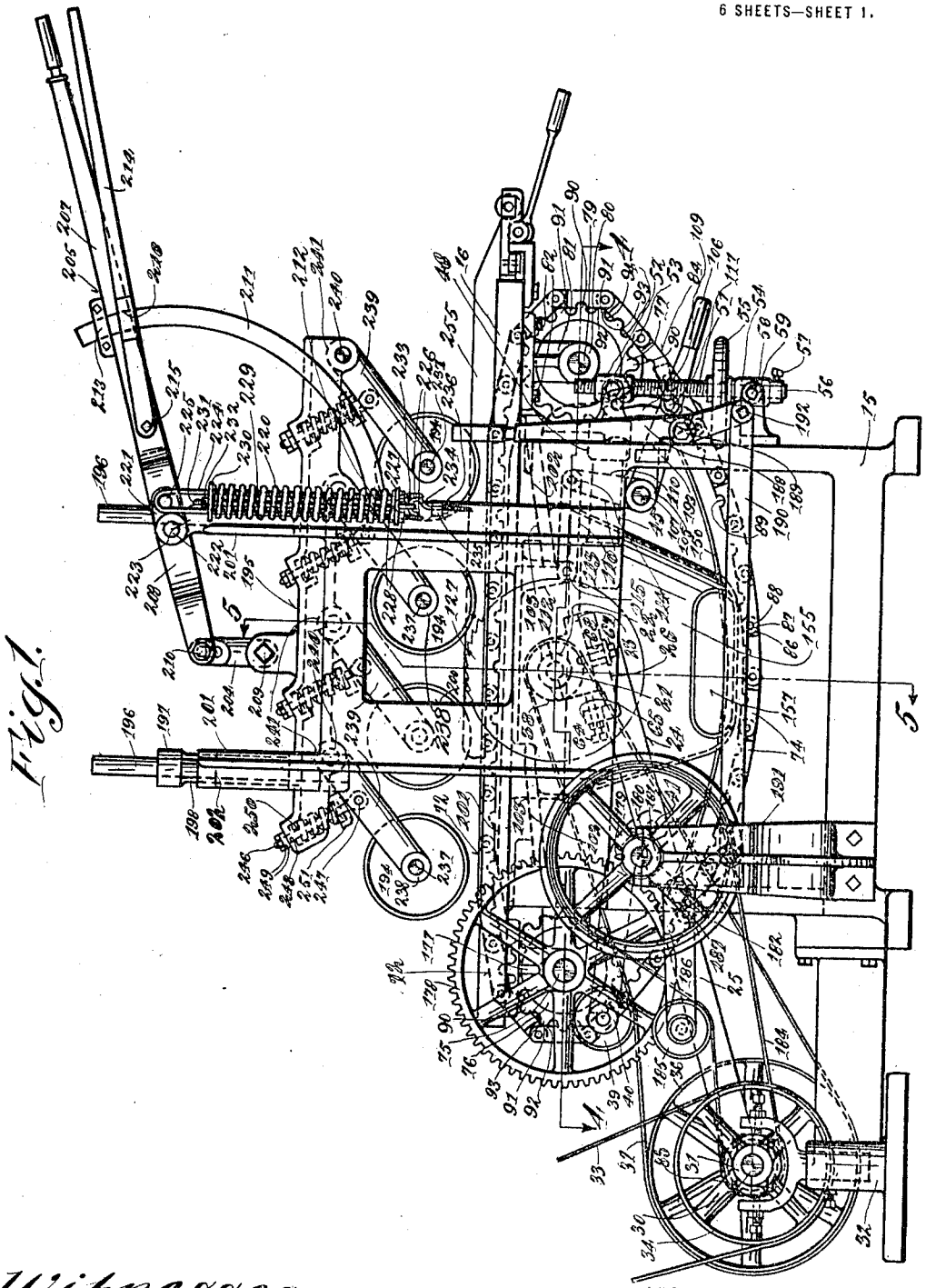


Fig. 1.

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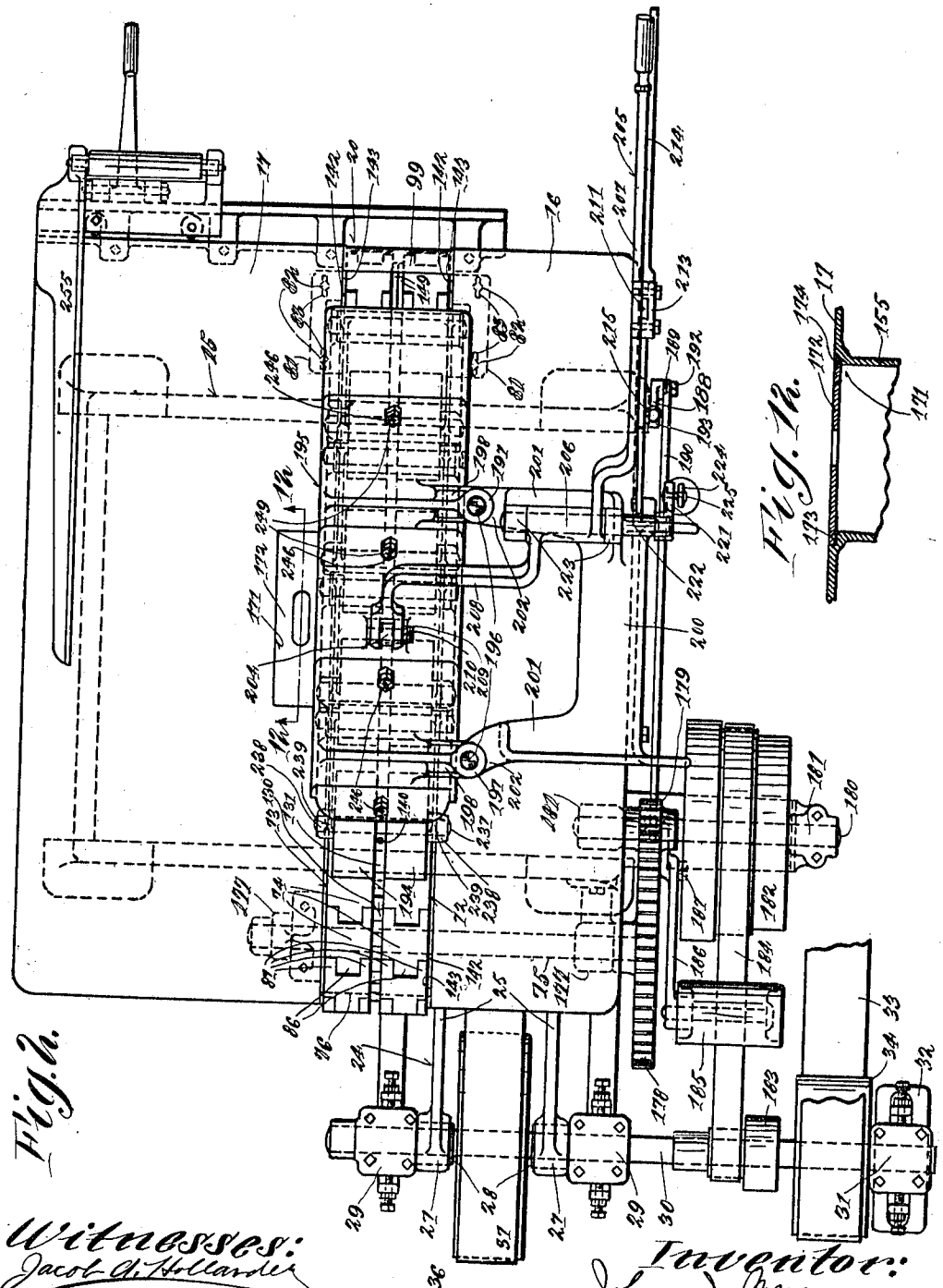


Fig. 2.

Fig. 12.

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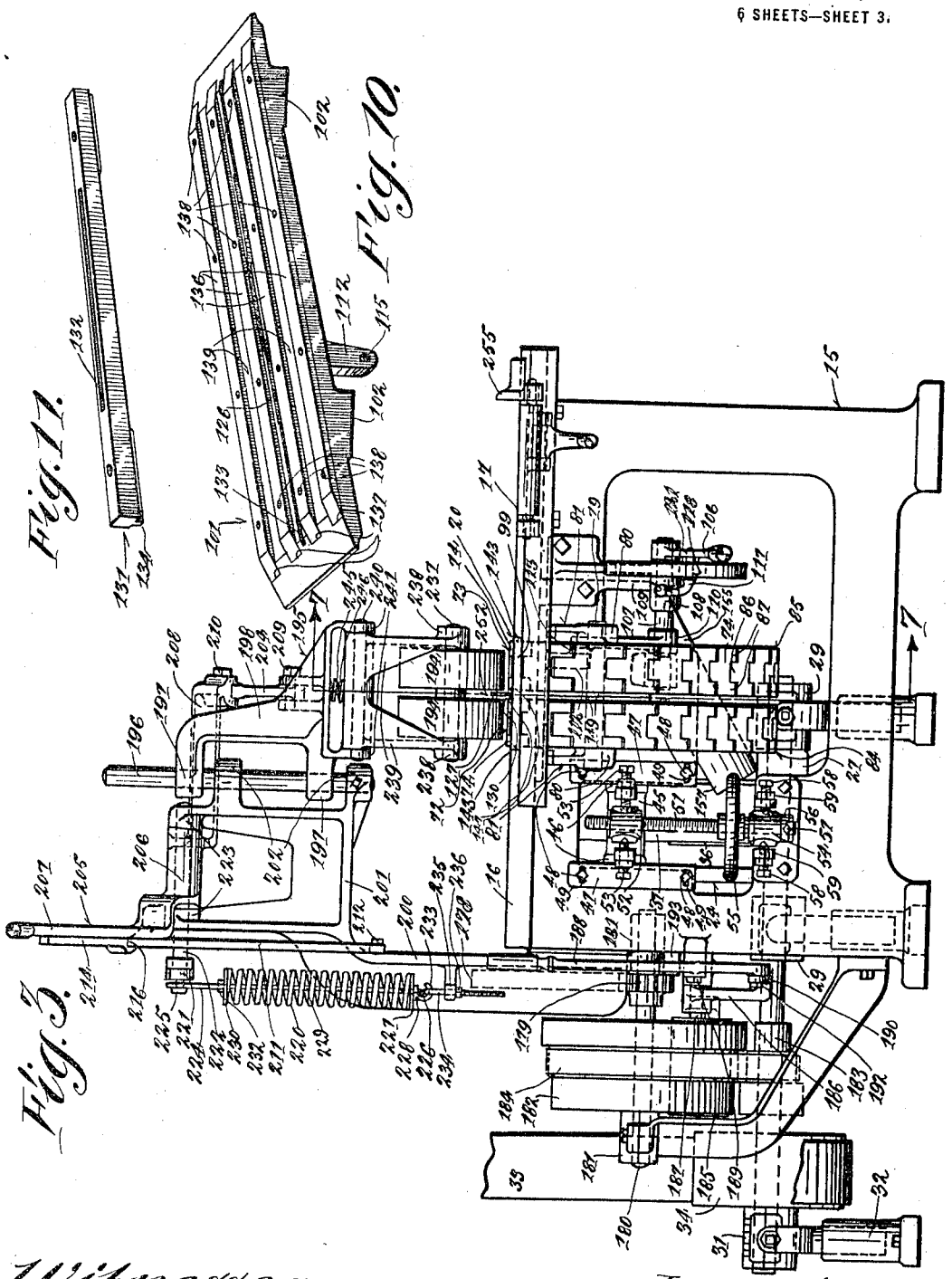


Fig. 5.

Fig. 11.

Fig. 10.

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6 SHEETS—SHEET 4.

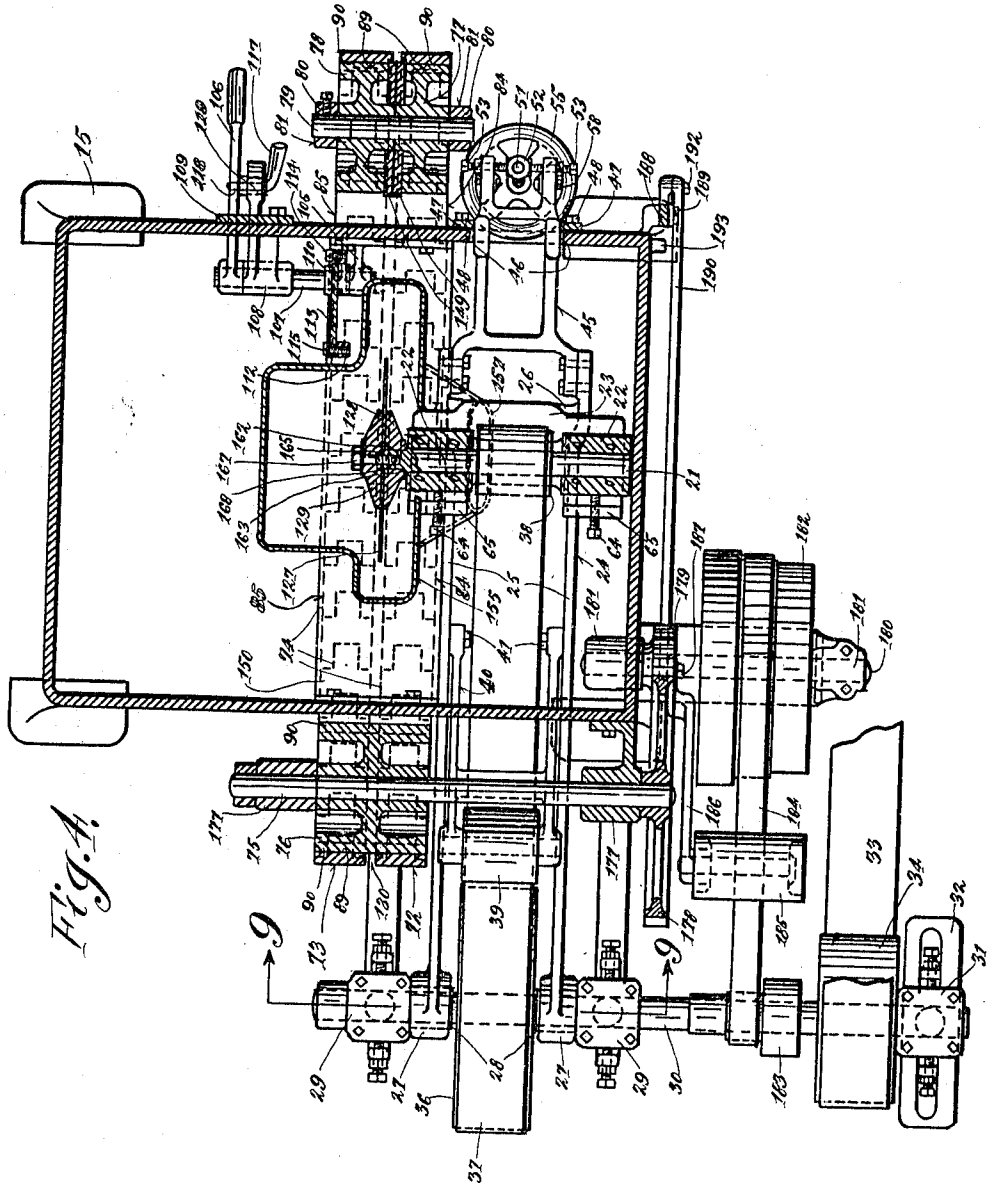


Fig. 4.

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6 SHEETS—SHEET 5.

Fig. 4.

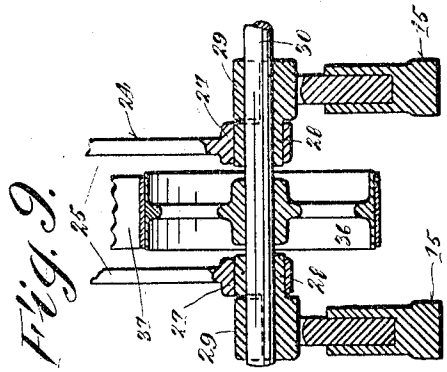


Fig. 5.

Fig. 6.

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6 SHEETS—SHEET 6.

Fig. 7.

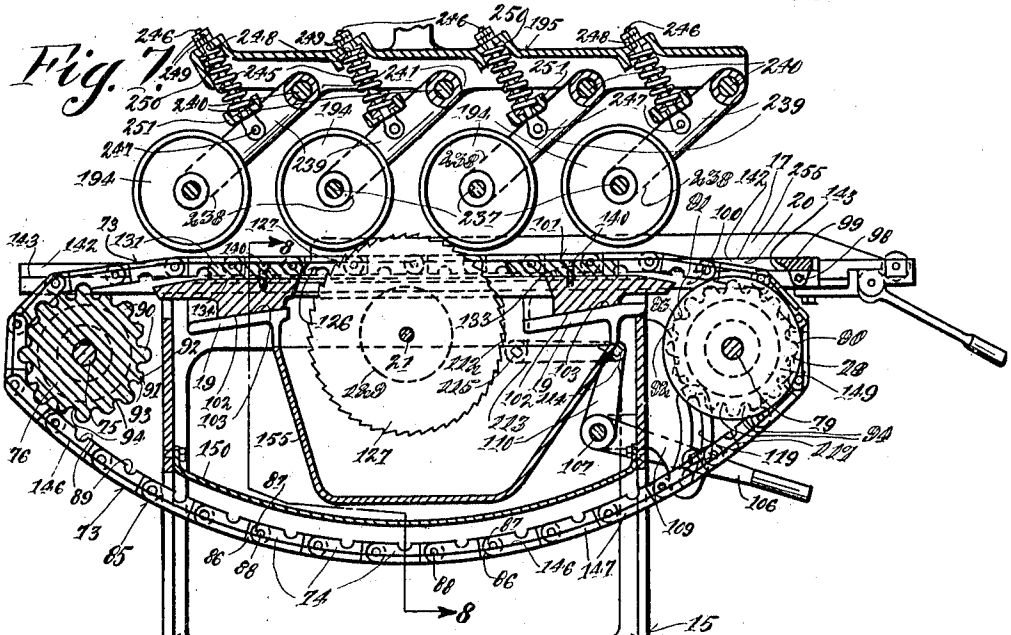
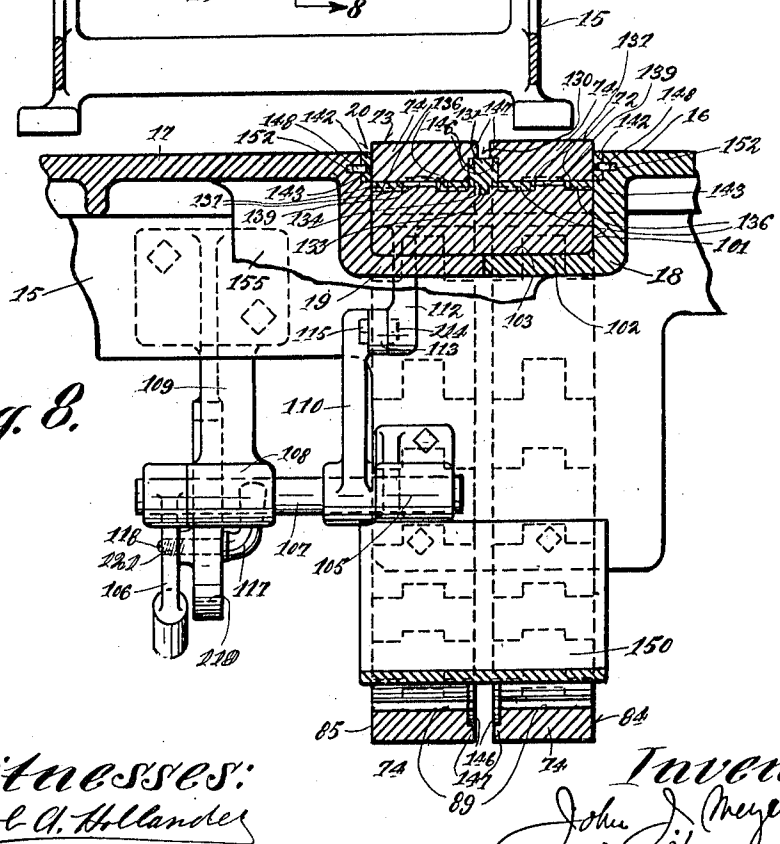


Fig. 8.



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UNITED STATES PATENT OFFICE.

JOHN J. MEYERS, OF CINCINNATI, OHIO, ASSIGNOR TO J. A. FAY & EGAN COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF WEST VIRGINIA.

SELF-FEED SAWING-MACHINE.

1,241,871. Specification of Letters Patent. Patented Oct. 2, 1917.

Application filed March 18, 1914. Serial No. 825,555.

To all whom it may concern:

Be it known that I, JOHN J. MEYERS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Self-Feed Sawing-Machines, of which the following is a specification.

My invention is applicable to so-called edging and rip-sawing machines wherein a board is fed lengthwise and its edge cut for providing the edge of the board with a so-called straight edge which is employed in the subsequent lengthwise cutting of the board as a guiding edge whereby the board is guided against the side-gage.

It is the object of my invention to provide a traveling endless table at each side of the saw-blade in a machine of the character stated whereby the board or material is fed lengthwise past the saw-blade; further to provide means in such relations of parts whereby equal traveling movements of the traveling endless tables in the same direction are maintained; further to provide novel means in a machine of the character stated whereby pressure is exerted upon the board and whereby the pressure means are quickly and readily elevated for exposure of the endless tables and saw-blade; further to provide novel means for adjusting the material-supporting stretches of the traveling endless tables to elevation; and further to provide novel means for access to and removal of the saw-blade in a machine of the character stated.

It is a further object of my invention to provide a sawing machine employing a circular saw and a traveling endless table at each side of said circular saw, said endless tables formed as loops, and a saw-dust hopper located in said loops about said saw-blade; further to provide such related mechanism with pressure-rollers above the saw-blade, whereby said pressure-rollers are permitted to yieldingly move in close adjacency to each other and to the periphery of the saw-blade; and, further, to provide a machine of the character described comprising a circular saw-blade, and a traveling endless table for the board at each side of the saw-blade, arranged in such manner that the teeth of the saw-blade will cut the board with a pressure exerted toward the supporting endless tables for causing traveling contact between said board and endless tables with pressure rollers above the board acting in close adjacency to each other and to the saw-blade.

The invention will be further readily understood from the following description and claims, and from the drawings, in which latter:

Figure 1 is a side elevation of my improved device.

Fig. 2 is a plan view of the same.

Fig. 3 is a front end elevation of the same.

Fig. 4 is a plan section taken on the irregular line 4—4 of Fig. 1.

Fig. 5 is a vertical cross-section taken on the irregular line 5—5 of Fig. 1.

Fig. 6 is an enlarged section taken on the same line, showing the manner of mounting the saw-blade and take-out plate.

Fig. 7 is a vertical longitudinal section taken on the line 7—7 of Fig. 3.

Fig. 8 is a detail in cross-section on the line 8—8 of Fig. 7, showing the manner in which the endless supporting tables and the slide therefor are mounted and also showing the adjusting means for the slide, the saw-dust hopper being broken away and the saw-blade omitted.

Fig. 9 is a sectional detail of the manner of mounting the saw-frame, taken on the line 9—9 of Fig. 4.

Fig. 10 is a perspective view of the slide and its steel guideways for the endless tables.

Fig. 11 is a perspective view of the separating guide-bar for the endless tables; and,

Fig. 12 is a detail in vertical section on the line 12—12 of Fig. 2, showing the supporting means for the take-out plate.

15 represents the main frame of the machine, on which there is a stationary table, shown as comprising table-sections 16, 17, which have adjacent shelves 18, 19, extending toward each other for forming a channel 20 extending lengthwise of the table between the stationary material-supporting faces of said stationary table.

A saw-mandrel 21 is journaled in bearings 22 of a yoke 23 adjustably supported on an adjustable saw-frame 24, the sides 25 of which are connected by a cross-piece 26, the said adjustable frame having bearings 27 about journal-sleeves 28 of bearings 29 supported by the main frame, (see Figs. 1, 2

and 9), in which a drive-shaft 30 is journaled. The saw-frame is located within the main frame, immediately at the side of the traveling endless tables hereinafter described, with the saw-bearing end of the saw-mandrel extending between the stretches of said endless tables. (See Fig. 5). The drive-shaft may also be journaled in a bearing 31 shown in this instance as on a floor-stand 32. Suitable driving means are provided, as a drive-belt 33 received about the driving pulley 34.

A driving pulley 36 for the saw-blade is fast on the drive-shaft, a belt 37 being received about said pulley and a pulley 38 on the saw-mandrel. A tightener pulley 39 for the last-named belt is journaled in a tightener-frame 40 pivoted on bolts 41 to the saw frame.

The saw-frame 24 is provided with a forward extension 45, having side guiding faces 46 received between side-guides 47 adjustably secured to the main frame, as by means of bolts 48 received through slots 49 in said side-guides and threaded into the main frame for clamping said side-guides in adjusted positions to the main frame. (See Figs. 1, 3 and 4.)

The saw-mandrel is arranged to be raised and lowered by means of a screw-rod 51, threaded in a pivot-nut 52 pivoted on trunnion-screws 53 in said forward extension 45. The screw-rod is journaled in a trunnion-bearing 54 in which it is prevented from moving axially by means of a hand-wheel 55 fast on the screw-rod and a collar 56 rigidly secured to the screw-rod by a bolt 57. The trunnion-bearing 54 is pivoted on trunnion-screws 58 threaded in lugs 59 of the main frame.

The adjustment of the mandrel-yoke 23 for alining the saw-mandrel and causing the saw-blade 127 to rotate in a path parallel to the line of feed of the material, (see Figs. 1, 4, 5 and 6), is accomplished by means of set-screws 64 threaded in lugs 65 of the saw-frame 24, clamp-bolts 67 being received through slots 68 in said saw-frame and threaded into the yoke 23 for clamping the yoke in adjusted positions.

When feeding material, for instance boards, lengthwise through the machine, it is arranged to be supported upon traveling endless tables which have wide supporting surfaces for the boards, the endless tables extending lengthwise of the boards at the respective sides of the saw-blade 127, and arranged for presenting a substantial wide supporting surface under the board at either side of the saw-blade, so that preferably each of said endless tables is arranged to independently support a board and feed the same lengthwise past the saw-blade.

The endless tables are exemplified at 72, 73, comprising material-supporting links 74 pivoted together. Driving means are shown for these endless tables, consisting of a feed-shaft 75, to which a sprocket-wheel 76 is secured, there being preferably one drive sprocket-wheel for the two endless tables shown. (See Figs. 1, 2, 4 and 7). 77, 78, are idler sprocket-wheels, journaled on a shaft 79 fast in bearings 80 respectively in hangers 81 adjustably secured to the stationary tables, as by means of bolts 82 received through slots 83 in said hangers and threaded into the stationary table. The idler-sprockets are loose about the shaft 79 so that they rotate independently, whereby the return stretches 84, 85, of the endless tables will by their weight cause the material-supporting stretches of the endless tables to move in their guideways in stretched and straight condition, and thereby maintain equal feeding movement of both of the wide surfaced material-supporting feeding stretches of the endless tables, for maintaining a single board supported on and fed by both the feeding stretches past the saw-blade in its true line of feed, for forming both the edges of the board cut by the saw-blade as a glue-joint, and preventing side swerving of the board during the feeding movement. Buckling of the feeding stretch of each endless table is also avoided, as said feeding stretches are both maintained in independently stretched condition, due to the fact that the driving sprocket wheel 76 acts to pull both feeding stretches with an equal feeding movement at one end of the loops of said endless tables, the other ends of said loops passing about independently rotatable idler sprocket-wheels 77, 78, loose on their shaft, and the weight of the lower stretches of the endless tables maintain the feeding stretches of said endless tables independently taut. The board is held firmly against both the feeding stretches of the companion endless tables by the pressure exerted by the companion rollers thereabove.

The material-supporting links 74 are provided with lugs 86, 87, at their respective ends, pivot-pins 88 being received through said lugs for pivoting the supporting links together. The links are also provided with cross-grooves 89 with which drive-teeth 90 on the sprocket-wheels, having rounded ends conforming to said grooves, coact. The sprocket-wheels are also provided with supporting teeth 91 having end-supporting faces 92, 93, arranged to coact with the respective proximate ends of each pair of supporting links at the pivots between the same, there being cross-grooves 94 in said sprocket-wheels between the teeth 90 and 91, acting as clearance spaces for receiving any dirt or dust that may work in between the sprocket-wheels and endless beds.

The upper or feeding stretches of the end-

less tables are arranged to be supported on an adjustable support 101, which is arranged to be raised and lowered for raising and lowering the supporting or feeding stretches of the endless tables simultaneously, with relation to the plane of the material-supporting surface of the stationary table. (See Figs. 5, 6 and 7). The adjustable support is provided with inclined supporting faces 102 supported on inclined guides 103 on the shelves 18, 19, and arranged to be moved endwise, whereby all parts of the support or slide are caused to be simultaneously raised or lowered. The inclined guides slant upwardly toward the feeding-in end of the supporting stretches, so that, when said stretches are raised, the slide will move forwardly and extend a greater distance in advance of the saw-blade, for lessening the gap 100 between the forward end of said slide and the in-feeding sprocket-wheels, which is an important feature, especially when feeding warped or crooked material. A stretcher 99 may bridge the channel 20, in advance of the endless tables, the ends thereof being supported in the rabbets 143 hereinafter mentioned, and secured in place by bolts 98.

The endwise movement of the slide, in the present exemplification, (see Figs. 1, 3, 4, 7 and 8), is accomplished by means of a lever-arm 106 secured to a rock-shaft 107 journaled in a bearing 108 of a hanger 109 secured to the frame and in a bearing 105 secured to the frame. An arm 110 is fixed to said shaft and is connected with a lug 112 on the slide by means of a link 113 articulated to said arm 110 and lug 112 by articulations 114, 115. The lever-arm is arranged to be clamped in adjusted positions by means of a clamp 117 having a threaded shank 118 received through a slot 119 in the hanger 109 and threaded into a threaded bearing 121 in the lever-arm.

The slide is provided with slot 126 through which the saw-blade 127 is received, the side walls of the slot flaring downwardly for accommodating the flanges 128, 129, between which the saw-blade is clamped. (See also Figs. 5 and 6.)

Means are provided for separating the endless tables, whereby a saw-space 130 is provided between said endless tables, in which the saw-blade is arranged to rotate. (See also Figs. 10 and 11). For properly tracking the endless tables, a separating guide, shown as a bar 131 is provided in the line of the saw-blade and is provided with a saw-slot 132. This bar is on the slide 101, and is shown rigidly secured thereto, being preferably a steel bar for forming a steel separating guide between the material-supporting stretches of said endless tables. A tongue and groove connection is shown provided between the slide and bar, the groove 133 being in the slide and the tongue 134 at the bottom of the bar, the bar being secured to the slide by means of bolts 140.

The slide is also preferably provided with strips 136, preferably steel strips, there being preferably a pair of each of these strips for each of the endless tables, arranged in separated relation for coacting with the side portions of the supporting links of said endless tables. They are shown received in recesses 137 extending longitudinally of said slide and secured in place by bolts 138, the strips for each of the endless tables having a space 139 between them so that at least a substantial portion of the width of said supporting links is free from wear on account of the travel of said endless tables over their supports.

Coacting with the separating bar 131 there are side gibs 142 located in rabbets 143 in the upper edges of the side walls of the recess 20 in the table. Backing screws 144, locked in adjusted positions by lock-nuts 145, are arranged to force the gibs toward the traveling tables for providing definite guideways in which the supporting stretches of the endless tables move. Pins 148 extending from the side gibs into holes 152 in the side walls of the rabbets 143 prevent rising of the side gibs. The construction further provides guideways having wear-resisting walls, exemplified as steel walls, for said supporting stretches of said endless tables. In order that the saw-space 139 between the endless tables at the supporting surfaces of said supporting links may be reduced as much as possible consistent with proper clearance for the saw-blade, the adjacent faces of the supporting links of said endless tables are provided with rabbets 146, in which the separating bar is received, thereby forming overhanging proximate edges 147 for said supporting links.

Separating plates 149, (see Figs. 2, 4 and 7), are received between the sprocket-wheels 77, 78, the peripheries of the separating plates being received in the rabbets 146 at the inner edges of the supporting links, for maintaining the supporting links of the endless tables in equi-distant relation in advance of the saw-blade.

The intermediate portions of the inner faces of the suporting links which travel opposite the clearance-spaces 139, coact with the end-supporting faces 92, 93, of the supporting teeth 91 of the sprocket-wheels. (See Figs. 4, 5, 6 and 8). These faces determine the radial distance of the end supporting links from the axes of rotation of the sprocket-wheels, and the distance between the supporting links at the respective ends of the endless tables.

The engagement between said sprocket-wheels and supporting links takes place between faces not subjected to sliding contact,

insuring the maintenance of sizes of said parts, and the maintenance of said distances, and insuring coincident lengthwise travel of both of the endless tables, so that the supporting stretches of said endless tables at the respective sides of the saw-blade will travel equal distances for maintaining the board supported by said supporting stretches in a plane parallel to the plane of travel of said supporting stretches and preventing a swerving of said board at any point of its length out of its true path of travel. The constructions stated insure such accuracy in the travel of the endless tables as to permit glue jointing to be accomplished with employment of a circular saw. A shield 150 is provided above the return stretches of the endless tables.

A saw-dust hopper 155 is located about the saw-blade and is suitably secured in place. It is provided with a spout 157 which is suitably connected with the piping of a shaving exhaust system. The hopper is positioned about the saw-blade between the supporting stretches of the endless tables and the lower or return stretches thereof. (See Figs. 1, 3, 4, 5, 6 and 7).

I provide novel means for mounting the saw-blade in order to permit its ready mounting and removal. (See Figs. 4, 5 and 6.) The inner flange 128 is received over the reduced end 162 of the mandrel, against a shoulder 163 of said mandrel, the outer end of said reduced end extending only slightly outwardly beyond the plane of the contact-face 164 of said flange, for permitting the saw-blade to be moved across said contact-face close to said contact-face, whereby the saw-blade may be moved into and out of the saw-slots in directions at substantial right angles to the saw-mandrel. The outer flange 129 is centered about a bolt 167 received through the bore of the saw-blade and threaded into the threaded bore 168 of the saw-mandrel, for clamping the outer flange 129 against the saw-blade and the saw-blade against the inner flange, which is clamped against the shoulder 163.

The stationary table-section 17 is provided with an opening 171, (see Figs. 2, 5, 6 and 12), through which ready access is obtained to the bolt 167 for removal of the same and of the saw-blade, the short projecting end of the mandrel permitting the saw-blade to be moved laterally slightly beyond said end and then to be raised between the supporting stretches of the endless tables and thereby removed, the pressure-rollers having been raised. The saw-space between the pressure-rollers permits removal of the saw-blade lengthwise of the pressure-housing hereinafter described.

The said opening is normally closed by a plate 172 which rests on ledges 173, 174. The plate is also provided with a set-screw 175 arranged to be adjusted for contact with the side-gib 142 for giving lateral outward support to said side-strip.

Suitable means are provided for driving the feed-shaft at different speeds. The feed-shaft is journaled in bearings 177 on the main frame. A gear 178 is on the feed-shaft, and is meshed with a pinion 179 on a shaft 180 journaled in bearings 181 on the main frame. (See Figs. 1, 2, 3, 4 and 5.)

A step-pulley 182 is on said shaft and a step-pulley 183 is on the drive-shaft 30. A belt 184 is received about selective ones of said steps of said pulleys, this belt being normally loose and arranged to be tightened when feeding movement is desired, by means of a suitable tightener, which is exemplified as comprising a pulley 185 on a lever 186 pivoted at 187 to the frame, an operating lever 188 pivoted at 189 to the frame connecting with said lever 186 by means of a link 190 articulated with the lever 186 at 191 and with the operating lever at 192. When no feeding movement is desired, the handle end of the operating lever is depressed forwardly for causing the lower end of said lever to engage a stop 193.

Pressure means for the board are provided, shown comprising pressure-rollers 194 on a roller-housing 195 movable up and down on guide-rods 196 about which bearings 197 on the roller-housing are received, the bearings about each of the rods being separated vertically on a bracket 198. (See Figs. 1, 2, 3, 5 and 7.) A standard 200 extends upwardly from the main frame and has a bracket 201 which projects over the material-supporting surface of the stationary table, and is provided with bearings 202 in which said guide-rods 196 are received, the bearings for each rod being shown separated vertically, with one of the bearings 197 received between the same. In the present exemplification, the rod is shown secured in the bearings of the bracket on the standard, the bearings of the roller-housing being guided thereby.

For raising and lowering the roller-housing I provide a lever 205, which comprises a bearing 206, an operating arm 207 and an arm 208, the latter connecting with the roller-housing by means of a link 204 articulated with the roller-housing at 209 and with the arm 208 at 210, shown as a slot and pin connection to permit yield of the roller-housing in case of excessive raising action by the material.

The said lever is positioned in adjusted positions by means of an arc-piece 211 pivoted to the standard at 212 and received through a friction-bearing 213 on said operating arm 207. A locking lever 214 is pivoted to the operating arm 207 at 215 and is provided with a slot 216 through which said arc-piece 211 is received. The locking le-

ver will normally drop by its own weight and cause locking engagement with the arc-piece and consequently prevent downward movement of the roller housing. The outer ends of said arms 207, 214, are close together so that the locking action of said locking lever on said arc-piece is readily released when it is desired to raise or lower the roller-housing.

Suitable counter-balancing means are provided for the roller-housing, exemplified as a spring 220. 221 is an arm fast on the shaft 222 about which the bearing 206 is pivoted, this shaft being rockable in bearings 223. A strap 224 has its loop-end received about a pin 225 on the arm 221, the ends of said strap being threaded, as shown at 226, and received through a plate 227 against which one end of the spring 220 is received. Nuts 228 are threaded about said threaded ends. A rod 229 is received through said plate 227 and said spring and a plate 230, against which the other end of said spring exerts its expansive pressure, said rod at said latter plate being threaded, as shown at 231, a nut 232 being received about said threaded end. The end of said rod adjacent to the plate 227 is connected with the frame, as by means of hooks 233, 234. The adjustment of the nuts 228 and 232 adjust the tension of the spring, and the tension of the spring is also adjusted by adjustment of the threaded shank of the hook 234 in the bearing 235 by means of the nut 236.

The pressure-rollers 194 are fixed, preferably in pairs, on shafts 237, journaled in bearings 238, of depending swinging arms 239, pivoted on shafts 240 journaled in bearings 241 of the roller-housing.

Springs 245 are located between the arms and the housing for normally exerting pressure downwardly upon the material being fed through the machine. These springs are shown received about rods 246 pivoted to the depending arms at 247 and received through holes 248 of said housing, nuts 249 adjusting the range of movement of said depending arms and limiting the downward movement of the rollers in any adjusted position of the roller-housing. The springs are received between sockets 250 in said roller-housing and socket-pieces 251 about said rods. A space 252 is provided between the pairs of rolls in which the saw-blade may be received.

The depending arms slant in the direction of feeding movement, so that the board when it is fed into the machine or through the machine shall swing said depending arms about their supporting pivots with a lateral pressure upon said arms against the tension of the springs for avoiding binding of the parts.

When it is desired to edge the board, that is, provide it with a straight edge, the board is fed through the machine upon the traveling tables, the rollers exerting pressure upon the board for causing lengthwise movement of the board in the plane of movement of the endless tables, whereby one edge of the board is sawed straight. This sawing takes place closely adjacent to one edge of the board.

This straight edge is then guided against a suitable side gage 255 arranged to be selectively placed at suitable position above the stationary table-section 17 for determining the proper width of board to be cut, the board at each feeding movement being maintained in a path parallel to the path of travel of the endless tables for insuring the straight cutting of the board at each cutting thereof. The construction of my improved device provides a wide space at each side of the traveling tables for support of the board when desired. The supporting stretches of the endless tables may, if desired, be lowered to be in the plane or below the plane of the material-supporting surface of the stationary table, and the roller housing be raised so that the rollers are out of the way, if it is desired to use the machine as an ordinary sawing machine.

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

1. A circular sawing machine comprising a circular saw-blade, endless feeding tables at the respective sides of said saw-blade traveling in parallel paths in the same direction, the proximate edges of said endless feeding tables separated a distance substantially equal to the width of the kerf of said saw-blade, and means above said endless feeding tables maintaining the board on said endless feeding tables by pressure as said board is laid on said endless feeding tables throughout the feeding movement of said board lengthwise past said saw-blade.

2. A circular sawing machine comprising a circular saw-blade, an endless feeding table at each side of said saw-blade, said endless feeding tables traveling in parallel paths in the same direction, and a guide between the proximate edges of the stretches of said endless feeding tables at the saw-blade position, said guide having a saw-slot therein, and said proximate edges extending over the top of said guide toward each other and toward said saw-slot, whereby said proximate edges are brought into close proximity to said saw-blade.

3. In a machine of the character described, the combination of a stationary table, a pair of independent endless feeding tables comprising upper material-supporting stretches in said stationary table arranged to travel in parallel paths in the same direction, a rotatable circular saw-blade having its axis

of rotation below said material-supporting stretches and extending between and above said material-supporting stretches, a slide through which said circular saw-blade projects from below, said slide simultaneously coacting with both said material-supporting stretches, and means for adjusting said slide lengthwise for equally adjusting both said material-supporting stretches to height with relation to said stationary table.

4. In a machine of the character described, the combination of endless feeding tables having upper material-supporting stretches traveling in closely adjacent paths in the same direction, a circular saw-blade extending upwardly between said material-supporting stretches from below into material-cutting position, and pressure-rollers respectively at front and rear of said circular saw-blade having material-contacting peripheries arranged to be received within the cylindrical projection of the circle of the cutting edge of said circular saw-blade, the material-supporting surface of said material-supporting stretches and said material-contacting peripheries provided with saw-blade slots of approximately the width of the kerf of said circular saw-blade.

5. A circular sawing machine comprising a circular saw-blade, endless feeding tables at the respective sides of said saw-blade traveling in parallel paths in the same direction, a driving sprocket-wheel whose driving relation to both endless feeding tables is fixed, relatively loose independent driven sprocket-wheels for said endless feeding tables, the proximate edges of said endless feeding tables separated a distance substantially equal to the width of the kerf of said saw-blade, and means above said endless feeding tables maintaining the board on said endless feeding tables by pressure as said board is laid on said endless feeding table throughout the feeding movement of said board lengthwise past said saw-blade.

6. A board edging machine comprising the combination of a pair of endless feeding tables each comprising jointed links having wide board-supporting surfaces and having a saw-blade path between them, means for guiding said endless feeding tables in paths forming board-supporting stretches at the respective sides of said saw-blade path, the proximate side edges of said board-supporting stretches located in substantial juxtaposition with said saw-blade path between them, pressure-rollers above said board-supporting stretches respectively at the front and at the rear of said saw-blade path, coacting with said respective endless feeding tables respectively at the front and at the rear of said saw-blade path, means for simultaneously pulling said board-supporting stretches of said endless feeding tables past said saw-blade path and under said pressure-rollers, and means for independent reverse stretching of said respective board-supporting stretches of said endless feeding tables.

7. A board edging machine comprising the combination of a saw-blade, a pair of endless feeding tables, said tables respectively comprising links having wide board-supporting surfaces, said respective endless feeding tables arranged in the form of loops comprising board-supporting feeding stretches, a sprocket-wheel at one end of said loops pulling said feeding stretches with equal speed past said saw-blade, means supporting said respective endless feeding tables at the other ends of said loops for independent and relative endwise movement of said other ends, and pressure-rollers at the respective sides of said saw-blade both to front and to rear of said saw-blade coacting with said endless feeding tables, said endless feeding tables and said pressure rollers respectively having a saw-blade space between them of substantially the width of the kerf of said saw-blade.

8. A board edging machine comprising the combination of a saw-blade, a fixed table, a pair of endless feeding tables having board-supporting feeding stretches in said fixed table for feeding the boards lengthwise, means for guiding said feeding stretches at the respective sides of said saw-blade in directions parallel with the plane of said saw-blade, independently yieldable pressure rollers at the front and rear of said saw-blade, said pressure rollers coacting with each of said pair of feeding stretches of said endless feeding tables at both front and rear of said saw-blade, means for combinedly feeding said endless feeding tables with said board-supporting feeding stretches moving past said saw-blade, and means for independently stretching said feeding stretches in reverse direction.

9. A board edging machine comprising the combination of a saw-blade, a fixed table, a pair of endless feeding tables having board-supporting feeding stretches in said fixed table for feeding the boards lengthwise, means for guiding said feeding stretches at the respective sides of said saw-blade in directions parallel with the plane of said saw-blade, pressure-rollers at the front and rear of said saw-blade, said pressure-rollers coacting with each of said pair of feeding stretches of said endless feeding tables at both front and rear of said saw-blade, means for combinedly feeding said endless feeding tables with said board-supporting feeding stretches moving past said saw-blade, means for independently stretching said feeding stretches in reverse direction, and means for relative up and down adjustment between said feeding stretches and said fixed table.

10. In a sawing machine of the character described, the combination of a saw-blade, a pair of endless feeding tables each comprising jointed links having wide board-supporting surfaces, means for guiding said endless feeding tables in paths forming a pair of board-supporting stretches at the respective sides of said saw-blade for feeding a board laid on both said board-supporting stretches lengthwise in a path parallel to the path of said saw-blade, each of said pair of board-supporting stretches arranged for independently supporting a board and feeding the same past said saw-blade, the proximate side edges of said board-supporting stretches located in substantial juxtaposition and having a saw-blade space between them of substantially the width of the kerf of said saw-blade, pressure-rollers above said board-supporting stretches respectively at the front and at the rear of said saw-blade and coacting at both said front and said rear of said saw-blade with said respective board-supporting stretches, means simultaneously pulling said board-supporting stretches past said saw-blade and under said pressure-rollers, and means for independent reverse stretching of said respective board-supporting stretches.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN J. MEYERS.

Witnesses:

CHARLES E. WEBER,

THERESA M. SILBER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."