United States Patent

Templin

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[54] APPARATUS FOR PREFABRICATING WOOD STRUCTURES

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[21] Appl. No.: **105,253**

[52] **U.S. Cl.**.....**100/139,** 100/153, 100/154, 100/176, 100/210, 100/Dig. 13, 227/152, 269/321 F

[51] **Int. Cl.**.....**B30b 7/00**

[58] **Field of Search**.....100/137, 139, 210, 176, 154, 100/153, Dig. 13; 227/152; 269/321 F; 144/288.6

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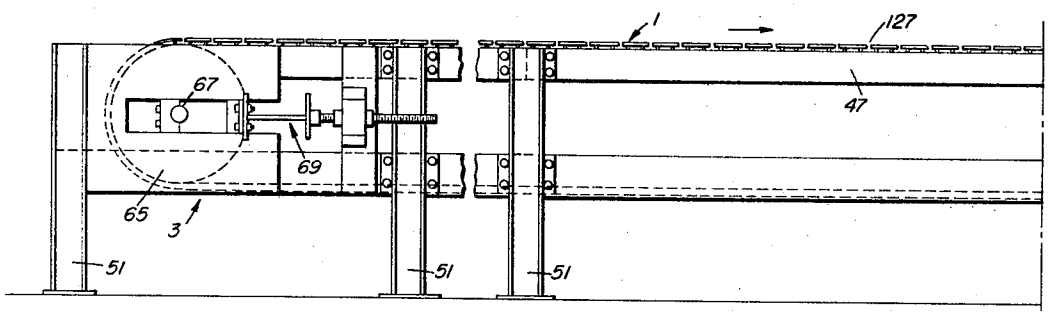
Primary Examiner—Billy J. Wilhite

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[57] **ABSTRACT**

Apparatus for fabricating wood trusses providing a moving jig upon which the metal truss plates are placed in proper position on the tops and bottoms of the joints of the wood truss, and are conveyed by the jig through a first pressure means which partially drive the truss plates into the wood truss at the joints thereof, only forcing penetration sufficient to hold the plates in proper position. A set of pressure rollers through which the truss, with the truss plates partially inserted in the truss, passes for forcing the truss plates into the wood truss into their final joint holding positions. The jib is provided with means for properly positioning the properly maintaining the truss thereon, certain of which are automatically disengaged when the means is reached.

15 Claims, 11 Drawing Figures



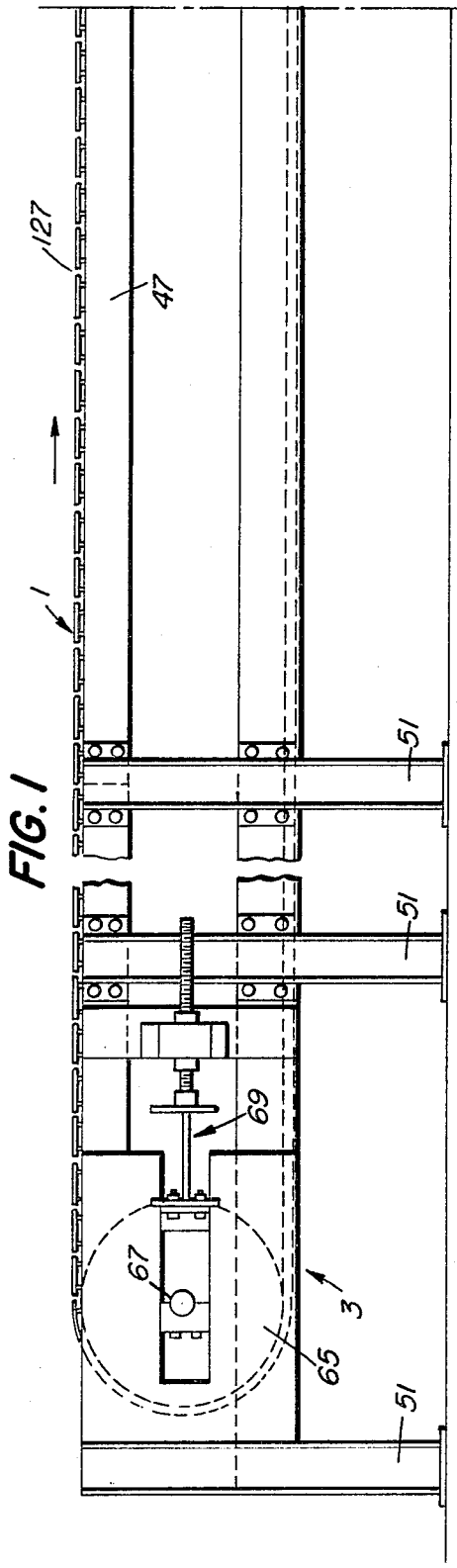


FIG. 1

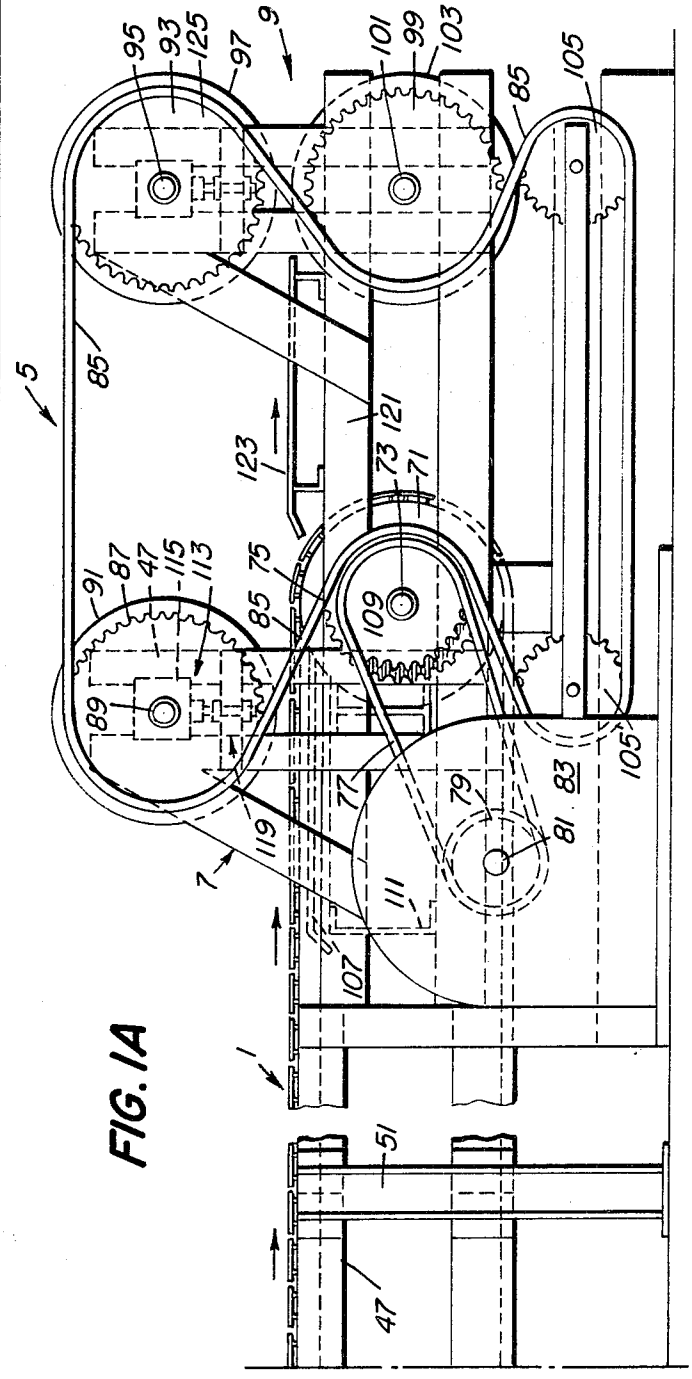


FIG. 1A

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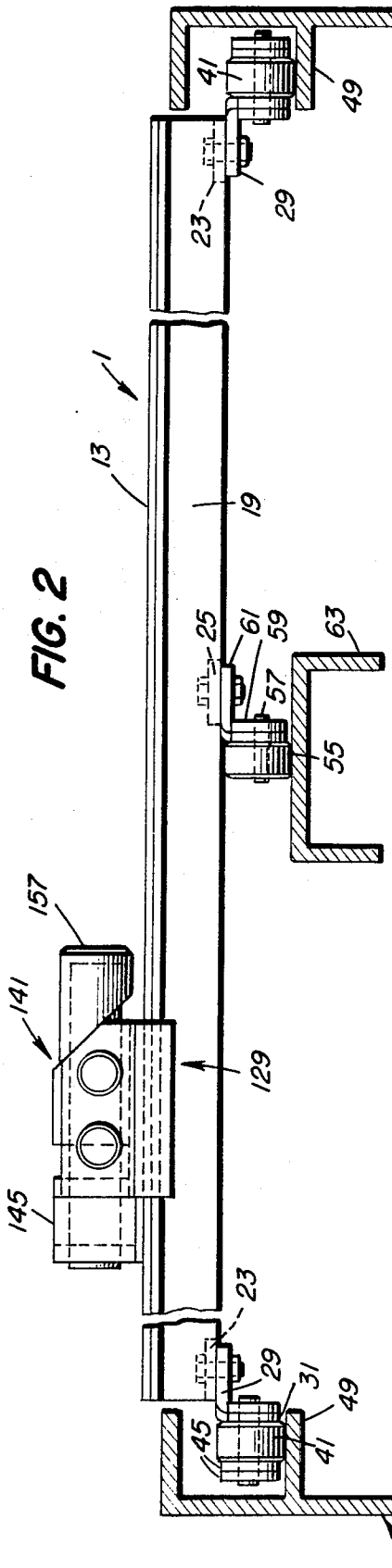


FIG. 2

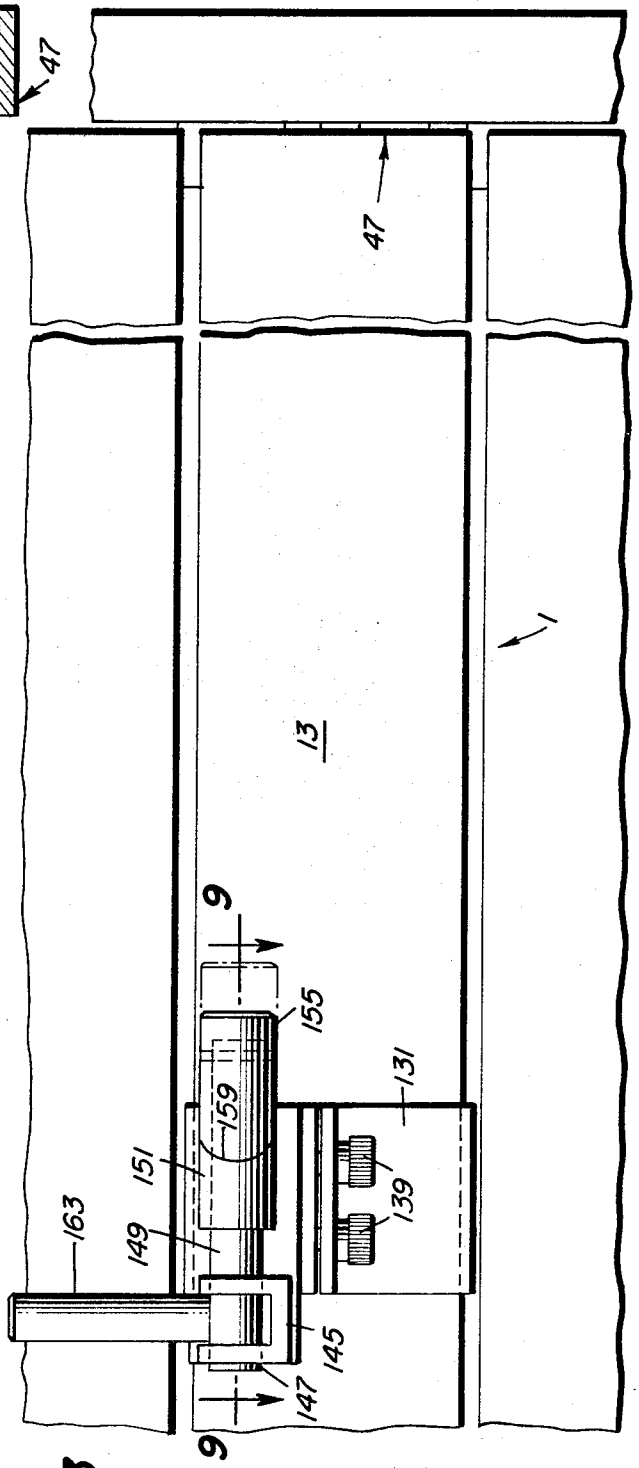


FIG. 3

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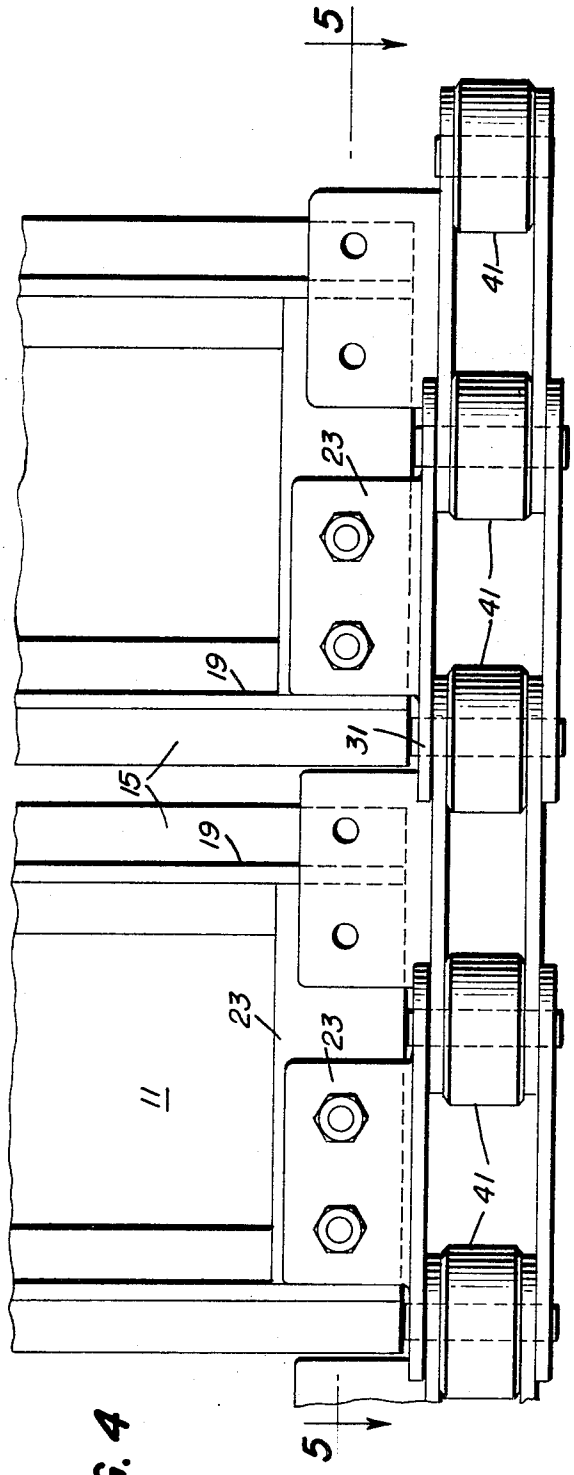


FIG. 4

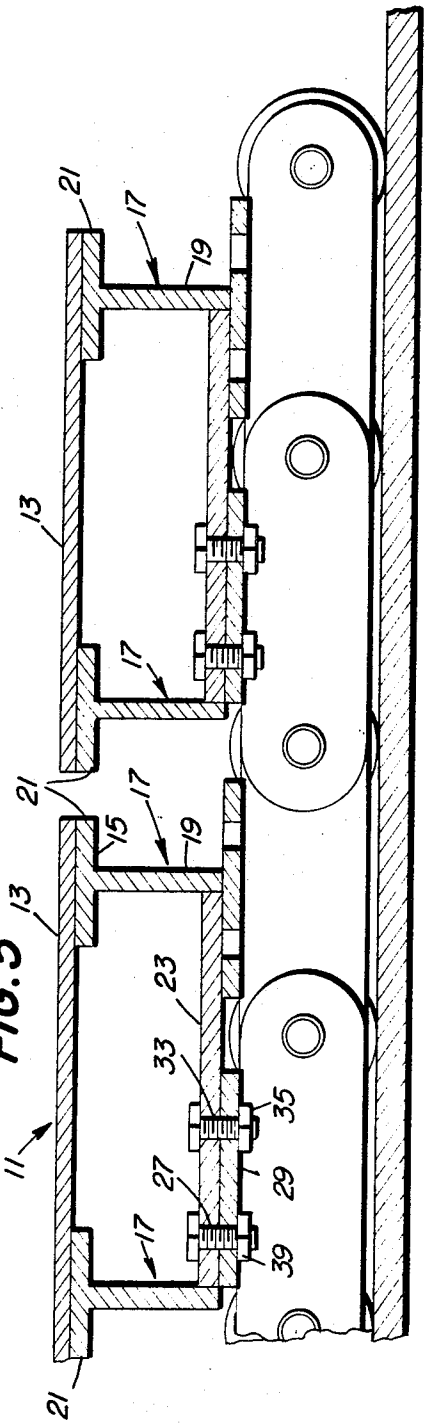


FIG. 5

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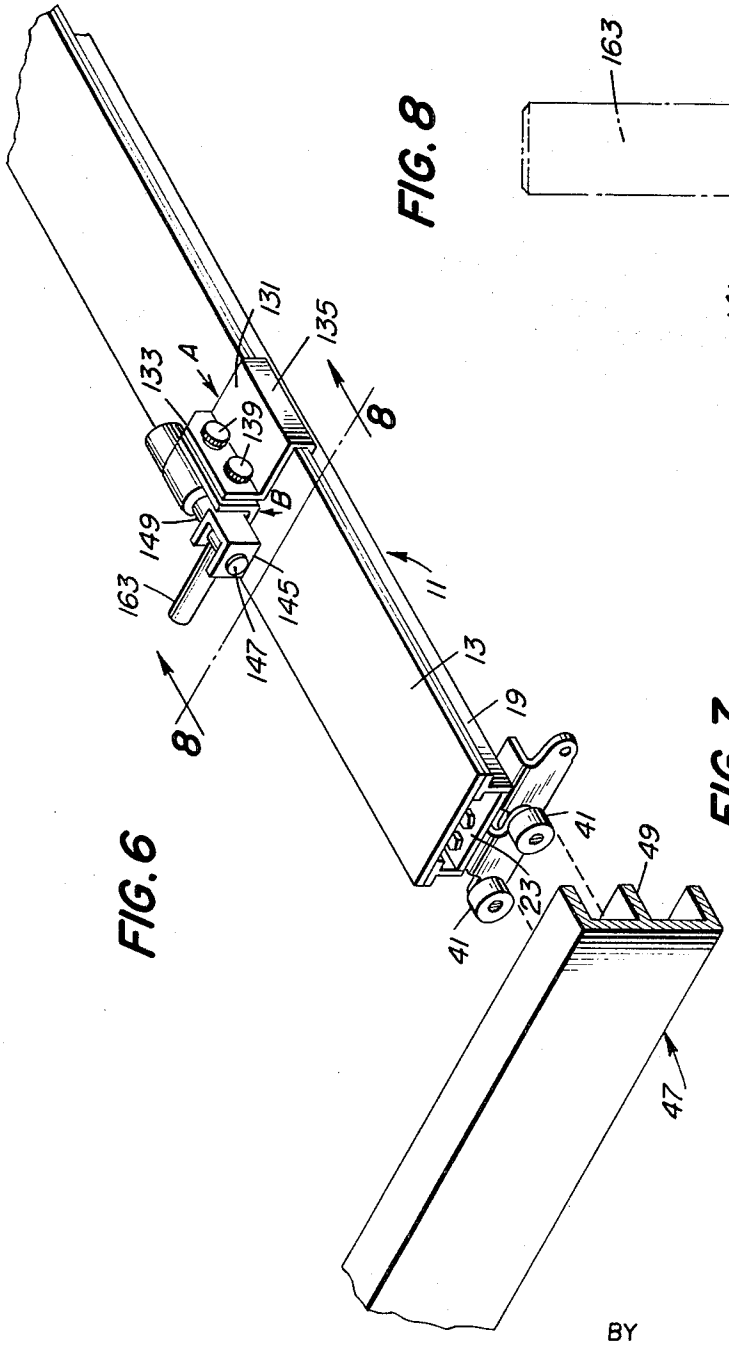


FIG. 6

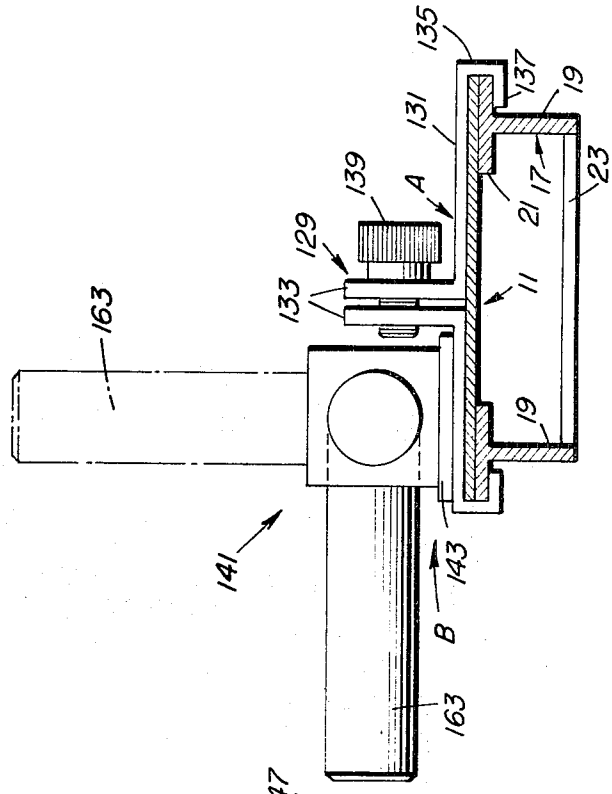


FIG. 8

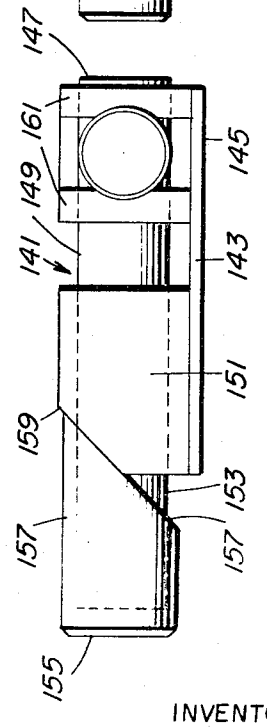


FIG. 7

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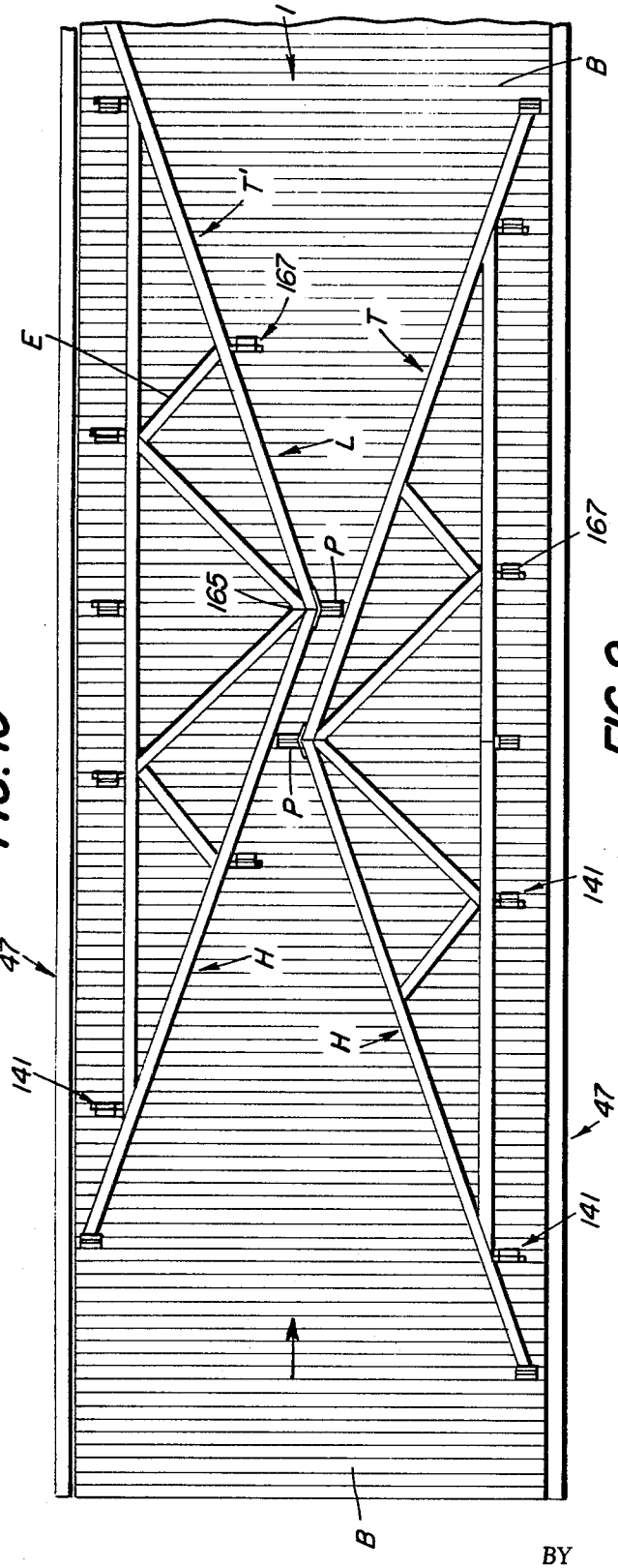


FIG. 10

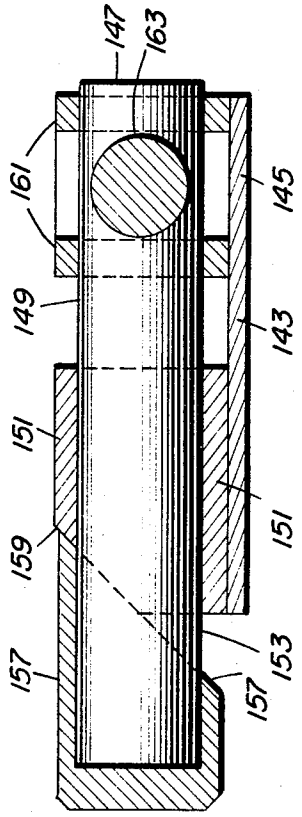


FIG. 9

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APPARATUS FOR PREFABRICATING WOOD STRUCTURES

This invention relates broadly to an apparatus for prefabricating wood trusses, and in its more specific aspects it relates to a unique jig, or conveyor means, for conveying wood trusses to an initial set of pressure means, and then to a set of pressure rollers, the initial pressure means operating to partially set, or cause partial penetration of the teeth of the metallic truss plates into the joints of the wood truss, and the set of pressure rollers function to fully set and cause complete penetration of the teeth of the metallic truss plates into the wood truss at the joints thereof to permanently hold the elements of the truss in their proper relative positions; and the nature and objects of the invention will be readily recognized and understood by those skilled in the arts to which it relates in the light of the following explanation and detailed description of the accompanying drawings illustrating what I at present believe to be preferred embodiments or mechanical expressions of my invention from among various other forms, arrangements, combinations, and constructions, of which the invention is capable within the spirit and scope thereof.

The conventional metallic truss plate comprises a body portion from which are struck up a plurality of teeth or prongs which are adapted to be pressed into the elements of a wood truss at the joints thereof to hold such elements together in truss forming position. The teeth, or wood penetrating prongs, of the metallic truss plate are conventionally arranged in rows, and it has been my experience in this field that in pressing metallic truss plates of this character, into the wood trusses by rolling, it is highly desirable, to produce a proper finished product, to roll one row of teeth or projections into the wood, at a time. This fact, that it is necessary, or at least highly desirable, to pressure roll one row of teeth at a time into final wood penetrating position has presented certain problems, particularly where the wood truss and the properly positioned metallic truss plates are supported on a jig, or the like.

In the apparatus of this invention, the properly positioned trusses and metallic truss plates are supported on a solid flexible jig which functions, not only to properly position the truss plates with respect to the wood truss for the final pressing action, but also functions to convey the trusses and metallic truss plates to the initial partial pressing station and then to the final pressing or rolling station. In view of the comments above, it will be appreciated that the final pressing operation cannot be accomplished while the trusses and the truss plates are supported on this solid flexible jig, since with these elements so supported one row of teeth or projections could not be rolled, one at a time, into final wood penetrating position, because of the solid jig which provides a solid supporting surface for these elements.

I have successfully overcome this problem by providing a first partial pressure station into which the flexible solid jig passes to convey the wood trusses and the metallic truss plates thereinto, and the pressure mechanism at this first station is so arranged that the final metallic truss setting or rolling operation will not take place at this first station, instead the mechanism at this first station functions to partially set the metallic truss plates in position at the joints of the truss, such partial setting being only sufficient to maintain the metallic truss plates in proper position on the wood truss when, it is moved from this first station, to the second finalizing station, or pair of pressure rollers, which act to finally set and cause complete penetration of the teeth or prongs of the metallic truss plates into the wood truss. As this description proceeds, it will be evident that when each truss and its metallic truss plates are travelling through the first station where mechanism functions to partially set the metallic truss plates in the truss, such trusses and metallic truss plates will be supported on the solid flexible jig, so that it will not be possible at this station of the apparatus to press the teeth of the metallic truss plate, one row at a time, into the truss. It is to be recognized that the pair of pressure rollers at the second station is spaced beyond the solid flexible jig, so that when the final pressing operation is done, the truss, with the partially set metallic truss plates therein, will not be supported on the solid flexible jig. Thus, since the truss, with the partially set metallic plates therein, passes between the set of pressure rollers at the second station in a progressive manner, and at this point is not supported on a solid surface, the teeth or projections of the metallic truss plate will be finally set or pressed into the wood truss one row at a time.

The conveying jig for the trusses which are being fabricated in my apparatus is unique in several respects. It will be appreciated that the various elements of the truss which are positioned on the conveyor must be maintained in proper positions thereon as they are moved through the initial partial pressing station and then through the final pressing station. I have so arranged and constructed the conveyor of this invention that it will removably receive in adjustable positions means engaging the truss elements to maintain them in proper positions. It is also of significance to recognize that certain of these maintaining means which are located in a specific area of the truss are automatically released from their truss member maintaining positions as the truss begins its travel through the initial pressing station. As this description proceeds, it will become clear that the said maintaining means which are located in a different area of the truss need not be automatically released from their truss member maintaining positions, and the reasons for such operations will be fully explained hereinafter.

The jig of this invention includes a conveyor body to which motion is imparted by means of moving chains. The conveyor is mounted on rollers which in turn are affixed to the chains and it is significant to appreciate that the rollers are affixed to every other cha in link. The conveyor is composed of a plurality of what I shall term "slats" which extend transversely with respect to the direction of travel of the conveyor, and each roller which is affixed to each slat is connected to a link of the chain which is that link which is behind the direction of travel of the conveyor. Since the conveyor, which is composed of the slats, is flexible along planes which are transverse to the direction of travel of the conveyor, the conveyor at the end of a run curves downwardly. Thus, if the rollers which mount the slats were not attached to the following links with respect to each slat, the curving of the conveyor at the end of a run would occur too soon so that the proper operation at the initial partial embedding station would not occur.

With the foregoing general objects, features, and results in view, as well as certain others which will be apparent from the following explanation, the invention consists in certain novel features in design, construction, mounting and combination of elements, as will be more fully and particularly referred to and specified hereinafter.

Referring to the accompaning drawings:

FIG. 1 is a view in side elevation of the jig, with parts thereof broken away, and particularly illustrating the tail end thereof.

FIG. 1A is a side view in elevation of the jig, with parts thereof broken away, and particularly illustrating the drive means for the conveyor and the initial pressing station and the final pressing station.

FIG. 2 is a transverse sectional view through the conveyor illustrating the mounting and operating means for the slats of the conveyor and a fixing and maintaining means which is removably and adjustably mounted on a slat and is engageable with a truss member.

FIG. 3 is a top plan view of a slat of the conveyor, with parts thereof broken away, and particularly illustrating the maintaining and engaging means for a truss member.

FIG. 4 is a bottom view, with parts thereof broken away, of the mounting and operating means for the slats of the conveyor.

FIG. 5 is a view taken on the line 5—5 of FIG. 4.

FIG. 6 is an exploded view of a slat and the mounting means therefor.

FIG. 7 is a top plan view illustrating a truss member maintaining and clamping means.

FIG. 8 is a view taken on the line 8—8 of FIG. 6.

FIG. 9 is a view taken on the line 9—9 of FIG. 3.

FIG. 10 is a top plan view of a pair of trusses mounted in proper positions on the conveyor of the jig, parts thereof broken away.

In the accompaning drawings, and particularly in FIGS. 1 and 1A thereof, I have used the numeral 1 to designate, in its entirety, the conveyor of the apparatus upon which the members of the trusses are positioned for embedment of the metal truss plates therein in the proper positions. The numeral 3 designates generally the tail end of the conveyor, while the numeral 5 generally designates the motive power and embedding end of the conveyor. The numeral 7 has been selected to generally indicate the initial pressing station of the apparatus, at which the metal truss plates are partially embedded into the truss members at the joints thereof. The numeral 9 has been used to designate, in its entirety, the final truss plate embedding station at which the metal truss plates are completely embedded in the members of the truss at the joints thereof to permanently maintain said numbers in proper truss forming positions.

The conveyor of the jig is composed of a plurality of slats designated generally by the numeral 11, such slats in forming the conveyor being transversely arranged with respect to the travel direction of the conveyor, and each slat comprises an upper surface 13 which is mounted on and fixed to, as by welding or the like, the head 15 of a generally T-shaped member 17 which is provided with a stem or upright 19. Consideration of FIG. 5 of the drawings clearly indicates that a T-shaped member 17 is provided which extends longitudinally along each under surface of the slat upper surface 13, the longitudinally extending vertical edges 21 of the head 15 are disposed in the same vertical planes as the longitudinally extending edges of the slat surface 13. It will thus be apparent that each slat 11 has affixed thereto and depending therefrom adjacent each longitudinal edge thereof a T-shaped member 17.

Extending the full width between every stem or upright 19 of each slat is a mounting member 23 for the slats, such mounting member being welded at each end, or otherwise affixed, to each upright 19 of each slat. It should be recognized that the width of each mounting member 23 is substantially reduced relative to the length of each slat so that a mounting member 23 is provided at each transverse end of each slat. Intermediate the ends of each slat, I provide further mounting means for the slats which I have designated by the numeral 25 (see FIG. 2). Such mounting means 25, as will become apparent as this description proceeds, provides an additional mounting and supporting means for the slats of the conveyor as well as a drive means.

Each mounting means 23 adjacent the trailing end thereof is provided with a pair of longitudinally spaced holes 27 therein, and I provide for each slat an angled member having a base section 29 and an angularly disposed and depending section 31. The base section 29 being drilled to provide two holes therein which, when the base is in proper position relative to the mounting means, are in alignment with the holes 27. Any suitable means for fixing the base section 29 to the undersurface of the mounting means 23 may be provided, and as an example, I disclose headed screws 35 which extend through the holes in base section 29 and those in the mounting means 23, and on the extending end thereof I may employ nuts 35 so that when the nuts are threaded on the screws, the base portion 29 will be affixed to the mounting means 23 and the depending arm 31 will depend downwardly therefrom and beyond the vertical plane of the transverse edge of each slat. Consideration of FIG. 2 of the drawings clearly illustrates that an angle member having the base 29 and the depending arm 31 will be affixed to each end of the slat. Each depending arm 31 rotatively mounts a roller 41, such mounting arrangement may be of any type, such as is well known in the art. The pintle 43 which extends through the roller 41 and the depending arm 31 also extends through and is fixed to links 45 of the actuating chain for the conveyor. As I have stated hereinabove, each slat, through the mounting means 23, its depending arm 31 and a roller and pintle 43, is fixed to and driven by the following link 45 of the drive chains. This will be evident particularly in view of the disclosure of this characteristic of my invention as presented in FIG. 4 of the drawings.

At each side of the conveyor, I provide generally E-configured members designated generally by the numeral 47 and these supporting members 47 provide a roller track or supporting means 49 upon which the rollers 41 operate when the chains are moving and causing the links to travel. The members 47 may be supported in any suitable position as by means of legs or the like 51, the members 47 being affixed thereto in proper vertical positions thereon by any suitable means. I have found that in most fabrication work of this nature, it is desirable to have three or even more drive chains for the conveyor and in the example shown herein, I provide three of such drive means for the conveyor and these three means not only cause movement of the conveyor but also function to support the conveyor. Centrally of the conveyor, I provide a further chain having links 53 to which rollers 55 are fixed, such rollers 55 being rotatably mounted on a pintle 57 which extends through a depending arm 59 of a base portion 61 which is fixed to the intermediate mounting member 25, in the same manner that the base portion 29 is fixed to dependent arm 31. It is to be understood that variations in the construction of the roller mountings and means of attachment to the links of the chain may be used, and that such variations will fall within the spirit and scope of my invention. It is significant, however, that each slat be affixed to and driven by a following link in the chain. The intermediate rollers 55 are moveably supported on an angle element 63 which may be supported from legs, post or the like in the general manner of supporting means for the E shaped supporting members 47.

At the tail end 3 of the conveyor where the slatted conveyor system returns for another run, I provide any suitable type beam and bearing system.

I have illustrated one sprocket wheel 65 over which the chain at one side of the conveyor runs and, of course, there is a sprocket wheel for each of the three or more chains which produce travel in the conveyor. Any suitable bearing arrangement 67 for the sprocket wheels may be employed and an adjusting means 69 of any suitable type may be used for adjusting the sprocket wheels to maintain the conveyor with the proper degree of tautness.

The operational or motive power end 5 of the conveyor is particularly illustrated in FIG. 1A. A side chain of the conveyor passes over a powered sprocket wheel 71. While only one sprocket wheel is disclosed, it will be apparent that one is provided for each chain which is used in the conveyor apparatus. The motive power sprocket wheel 71 is fixed to an axle 73 which extends transversely across the conveyor apparatus and a further sprocket wheel for each chain is fixed to the axle 73 at the proper position thereon. It will be appreciated that rotation of the axle 73 in a manner to be described will cause rotation of the additional sprocket wheels which are affixed to the axle. Fixedly mounted on the axle 73 is a pulley 75 having a groove therein for an operating strap, or the like, 77 which extends from the pulley 75 to a pulley 79 which is fixed to the operating shaft 81 of an electric motor 83. The pulley 75 is formed with an additional groove around which an operating strap 85 extends and passes around a further pulley 87 which pulley is fixed to a shaft 89 so that when the pulley 87 is rotated by means of the strap 85, the shaft 89 will be rotated. Fixed to, and rotatable therewith, is an initial pressing or partial embedding roller 91. The strap 85 extends from the pulley 87 and around a further pulley 93 which is fixed to a shaft 95, and fixed to said shaft for rotation therewith is an upper pressure roller 97. The strap 85 is continuous and extends from the pulley 93 to a pulley 99 which is fixed on a shaft 101 to cause rotation thereof. A lower pressure roller 103 is fixed to the shaft 101 for rotation therewith. The strap 85 extends from the pulley 99 about a pair of spaced idlers 105 and 105' and from idler 105' the strap returns to the sprocket motor powered pulley 75. The strap 77 travels in the

direction of the dotted line arrow in FIG. 1A so that the strap 85 travels in the direction of the arrow adjacent the upper run of said strap. Thus, each of the rollers 91, 97, and 103 rotate in the direction of the arrow adjacent each roller.

I provide a fixed pressure plate 107 which extends transversely of the conveyor from one side to the other and is in independent transverse sections with a space therebetween of sufficient width to permit the intermediate chain of the conveyor drive to pass therebetween. The pressure plate 107 is mounted on an I-beam 109, such I-beam being positioned directly below the roller 91 so that a projected vertical plane from the I-beam will extend through the axis of the roller 91. The pressure plate 107 is also mounted and supported by an angle bar, or the like, 111. As will become apparent as this description proceeds, the partial embedding roller 91 and the pressure plate 107 coact with one another to cause partial embedment of the metallic truss plates into the members of the truss at the joints therebetween, when the apparatus is in operation. The partial embedding roller 91 is vertically adjustable toward and from the pressure plate 107 by any suitable means designated generally by the numeral 113. This vertical adjusting mechanism may comprise a block 115 in which the shaft 89 is mounted and the block is vertically adjustable on a pair of posts 117, such vertical adjustment being imparted to the block by means of a screw mechanism 119.

Mounted on a beam 121 is a guide plate 123. The beam 121 may be mounted and supported in the apparatus in any suitable manner, and the guide plate 123 extends transversely of the apparatus from side to side thereof and the upper surface of the guide plate is in substantially the same horizontal plane as the upper surface 13 of the conveyor slats.

The final truss plate embedding station 9 is positioned at the end of the apparatus where the trusses are in final fabricated form and emerge from the apparatus. It is at this station that the partially embedded metallic truss plates are fully and completely forced into and embedded in the truss members at the joints thereof. The pressure means for this final embedment comprises the upper roller 97 and the lower roller 103. The lower roller 103 is fixed, as to its vertical position, while the upper roller is vertically adjustable with respect thereto, such adjusting mechanism being designated in its entirety by the numeral 125. This mechanism will not now be described in detail as it is the same as the adjusting mechanism 113 for the partial embedding roller 91.

It will be appreciated that it is necessary to position and maintain the truss forming elements in their proper and desired positions on the conveyor. While there are several means which may be employed for accomplishing the purpose of maintaining the truss in proper position on the conveyor, I have evolved one form of such means which achieves the purpose thereof in a highly advantagous manner. Since trusses of differing spans and cambers may be fabricated on this apparatus, it is necessary that any truss member maintaining means be adjustable to conform to these different trusses. In FIGS. 6 and 8, particularly, I have disclosed one such adjustable medium which my work in this discipline indicates is highly satisfactory. The slats 11 are spaced apart from each other along their longitudinal edges, as is clearly shown at 127 in FIG. 1. This spacing between the longitudinally extending sides of adjacent slats permits the maintaining means to be movably or adjustably mounted on any slat. Such maintaining means comprises a pair of clamping means, designated generally by the numeral 129, and each of these clamping means 129 is of the same structure and comprises a base plate 131 having an element 133 upstanding from one end thereof and at the other end a flange 135 extends downwardly having an inwardly extending flange 137 extending from the lower end thereof. The space between the inwardly extending flange 137 and the lower surface of the base 131 is substantially equal to the thickness of the slat 13 and the head 21 of the T 17. In using the maintaining mechanism, each clamping means is positioned in the desired location on a slat with the base 131 resting on the slat and the members 135 and 137 embracing the ends of the slat and the head 21 while the flange 137 hooks under the head 21. Thus, it will be apparent that the two parts A and B, of the maintaining means, are positioned as especially illustrated in FIG. 8. In order to firmly hold the members A and B in their proper adjusted positions, I form threaded aligned holes in the upstanding members 133 into which are threaded screws 139. It will thus be apparent that upon tightening the screws, the upstanding members 133 of the parts A and B will be urged together thereby firmly clamping the members A and B to the slat.

The maintaining means 129, as has been explained, is removably clamped to a slat in any desired position thereon, and affixed to either base portion 131 is a truss member engaging and maintaining apparatus in the nature of a pressure means, and I have designated this pressure means in its entirety by the numeral 141. The pressure means 141 comprises a flat base 143 which is welded or otherwise affixed to either of the bases 131 of the maintaining means 129. I provide a journal bracket 145 into which extends one end of a shaft 147 which extends outwardly therefrom, as at 149. The bracket 145 is supported by the shaft 147–149 and is slidable relative to the base 143. A projected end or length of the shaft 149 rotatably extends into a fixed sleeve 151 which is fixed into any suitable manner to the base 143. The shaft extends beyond the confines of the sleeve 151, as at 153, and is provided with a working nose 155 which is adapted to engage a truss member when the pressure means is in operative truss member maintaining position. The projecting portion 153 of the shaft has affixed thereto and thereabout an element 157 which is provided at its rear and with an annular cam surface 159 which mates with and is cammed by a cam surface 159 which is provided on the forward end of the sleeve 151. The length of the shaft 147 which extends through the arms 161 of the bracket 145 is provided with a shaft operating handle 163. The shaft operating handle 163 is fixed to the shaft so that upon manipulation of the handle from the full line position of FIG. 8 to the dotted line position of FIG. 8 will result in rotation of all the lengths of the shafts 147, 149, and 153, as well as rotation of the element 157 which is fixed to the portion 153 of the shaft. Due to the mating cam surfaces 157 and 159, the portion of the shaft 153 with its nose 155 will be projected when the handle 163 is moved into the dotted line position of FIG. 8. In this position, as will be explained hereinafter, the nose 155 will be in pressure maintaining engagement with a truss member at the desired and preselected point thereon. It is to be recognized that various types of pressure fixtures for adjustable mounting on the conveyor and for maintaining engagement with the truss members may be used, and such pressure fixtures will still fall within the spirit and scope of my invention.

In the initiation of the wooden truss prefabricating operation, one or more trusses T and T' (see FIG. 10) may be operated upon at one time. In preparing the various materials and elements for fabrication into a truss, the metallic connector plates are first placed on the conveyor 1 with the prongs or teeth thereof in upright position. It will be appreciated that these plates are placed on the conveyor at prelocations, such locations being where the joints between truss members will be as at 165. When the metallic truss plates have been so placed in proper positions on the conveyor, the wooden truss elements are then placed on the conveyor in the proper positions for the final application of the wooden truss. When this operation is completed, a metallic truss plate is placed at every joint 165 between members of the truss, the teeth or prongs of each plate facing downwardly in engagement with the truss members. The leading half of each truss, which is that portion of the truss markedL, which extends from the peak P of the truss in the direction of travel of the conveyor may be maintained by fixtures marked generally by the numeral 167 such fixtures not being provided with means which is automatically released as the truss passes through the initial station 7. These fixtures 167 may be made in a variety of forms but preferably embody a maintaining means 129 (see FIG. 6 and 8) upon

which may be mounted and fixed a truss member engaging and maintaining shaft in the nature of the shaft **153**, however, the shaft in these fixtures **167** is not movable relative to the maintaining means **129** in order to apply maintaining pressure on the truss members T in the leading half of the truss. Instead, the fixtures **167** are movable into position engaging a truss member by positioning the maintaining means **129** relative to a slat upon which it is mounted. Thus, it will be recognized that by moving the maintaining means **129**, the truss member engaging shaft may be moved into engagement with said truss member.

The trailing half of each truss which follows the leading half L thereof in the direction of travel of the trusses on the conveyor, I have marked with the letter H, and this trailing half extends from the peak P of each truss rearwardly to the end thereof. In this trailing half of each truss, I use as the maintaining means the pressure means **141** which has been particularly illustrated in FIGS. **6–8** of the drawings. As was explained, when the shaft which engages the truss member to maintain it in proper position is projected, the operating or manipulating handle **163** is in upright position as illustrated in dotted lines in FIG. **8**.

When the truss members and metallic truss plates have been positioned on the conveyor and maintained in proper positions thereon by the fixtures **167** and the pressure fixture **141**, the electric motor **83** is energized so that the conveyor with the truss members, etc., thereon will move in the direction of the arrow and towards the initial station **7**. At this station the metallic truss plates will be partially embedded in the truss members at the joints thereof. As the conveyor moves in the direction of the arrows, the bottom edges of the uprights **19** of the slats will be in sliding engagement, at the initial station **7**, with the pressure plate **107** which is in alignment with the axis of the roller **91**. Thus, during this partial embedding operation, there will be a solid surface for the truss members and this is provided by the rigid pressure plate **107**. When the trailing half of the truss reaches the initial station **7**, each handle **163** of the pressure means **141** will engage the roller **91** and will be moved into inoperative position as illustrated in full lines in FIG. **8**, so that each pressure operating nose **155** will be retracted and not in maintaining engagement with its particular truss member. This is essential for those fixtures on the trailing half of each truss. For if this type of automatic release of these pressure fixtures was not provided, a piece of the wood of the truss members would be snapped or broken as the conveyor curves downwardly on its return run to the tail end of the apparatus. From the initial station **7**, the trusses with the partially embedded metallic plates therein slide across the guide plate **123** and then pass between the pressure rollers **97** and **103** at the final station **9** of the apparatus. It will be understood that at this station, the pressure rollers **97** and **103** fully embed the metallic truss plates into their final truss maintaining positions.

It will now be clear that at the initial station **7** the entire body of the metallic truss plate is on a rigid supporting surface formed by the slats of the conveyor which are rigidly supported by the uprights **19** which are in sliding engagement with pressure plate **107**. At the final station **9** the rows of teeth will be fully embedded, one at a time, since each row will progressively pass between pressure rollers **97** and **103**.

I claim:

1. Apparatus for prefabricating wooden truss members into a completed truss, including in combination, a conveyor for supporting wooden truss members and pronged metallic truss plates positioned below and on top of said wooden truss members and extending across the joints between said wooden truss members, means for imparting movement to said conveyor, the wooden truss members and metallic truss plates being movable with said conveyor, an initial pressure station adjacent the forward end of said conveyor for partially embedding said metallic truss plates into the wooden truss plates, and a final pressure station spaced from said initial station and beyond said conveyor for fully embedding said metallic truss plates into said wooden truss members to complete the fabrication of the truss.

2. Apparatus in accordance with claim **1**, wherein a rigid supporting surface is provided at said initial pressure station, and said truss members and metallic truss plates are supported thereon when they pass through the initial station.

3. Apparatus in accordance with claim **2**, wherein said rigid supporting surface comprises said conveyor and a fixed rigid member disposed thereunder, said conveyor being in sliding engagement with said fixed rigid member.

4. Apparatus in accordance with claim **3**, wherein a pressure roller is provided at said initial pressure station, said pressure roller being rotatively mounted above said conveyor and adapted to apply partial embedding pressure to the metallic truss plates.

5. Apparatus in accordance with claim **4**, wherein at least a portion of said fixed rigid member is in a vertical plane projected from the axis of said pressure roller.

6. Apparatus in accordance with claim **3**, wherein means depends from the upper surface of said conveyor and is movable therewith, and said means slidably engages said fixed rigid member.

7. Apparatus in accordance with clam **1**, wherein said final pressure station comprises a pair of vertically aligned and spaced apart pressure rollers.

8. Apparatus in accordance with claim **1**, wherein said final pressure station is spaced from said initial pressure station a distance less than the length of a truss being fabricated.

9, Apparatus in accordance with claim **1**, wherein means are adjustably mounted on said conveyor and are in engagement with said truss members maintaining them in position as they travel with the conveyor.

10. Apparatus in accordance with claim **9**, wherein certain of said means are releasable pressure means and the other of said means remain in maintaining engagement with certain truss members.

11. Apparatus in accordance with claim **10**, wherein said releasable pressure means engage and maintain the truss members comprising the trailing half of the truss, and said the other means engage and maintain the truss members comprising the leading half of the truss.

12. Apparatus in accordance with claim **10**, wherein the pressure on said certain of said means is automatically released at said initial pressure station.

13. Apparatus in accordance with claim **10**, wherein each of said certain of said means is provided with a swingable operating handle, said operating handle being in upstanding position when in operative position causing said means to engage and maintain a truss member, and a pressure roller at said initial station, said operating handle being engageable with said pressure roller and swingable thereby into inoperative position.

14. Apparatus for prefabricating wooden truss members into a completed truss, including in combination, a conveyor for supporting wooden truss members and pronged metallic truss plates positioned below and on top of said wooden truss members and extending across the joints between said wooden truss members, chain means for imparting movement to said conveyor, the wooden truss members and the metallic truss plates being movable with said conveyor, means applying pressure to said metallic truss plates as they are moved by the conveyor to embed them in the truss members, and said conveyor composed of a plurality of elongated slats having portions depending therefrom, mounting means fixed to said portions, rollers rotatably carried on said mounting means, a track for said rollers and said rollers being connected to a chain.

15. Apparatus in accordance with claim **14**, wherein said chain includes links and each roller is connected to a link rearwardly thereof with respect to the direction of travel of the conveyor.

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