O. TORSETH.

DEVICE FOR CONVEYING LOGS.

APPLICATION FILED JULY 22, 1909.

966,489.

Patented Aug. 9, 1910.

2 SHEETS—SHEET 1.

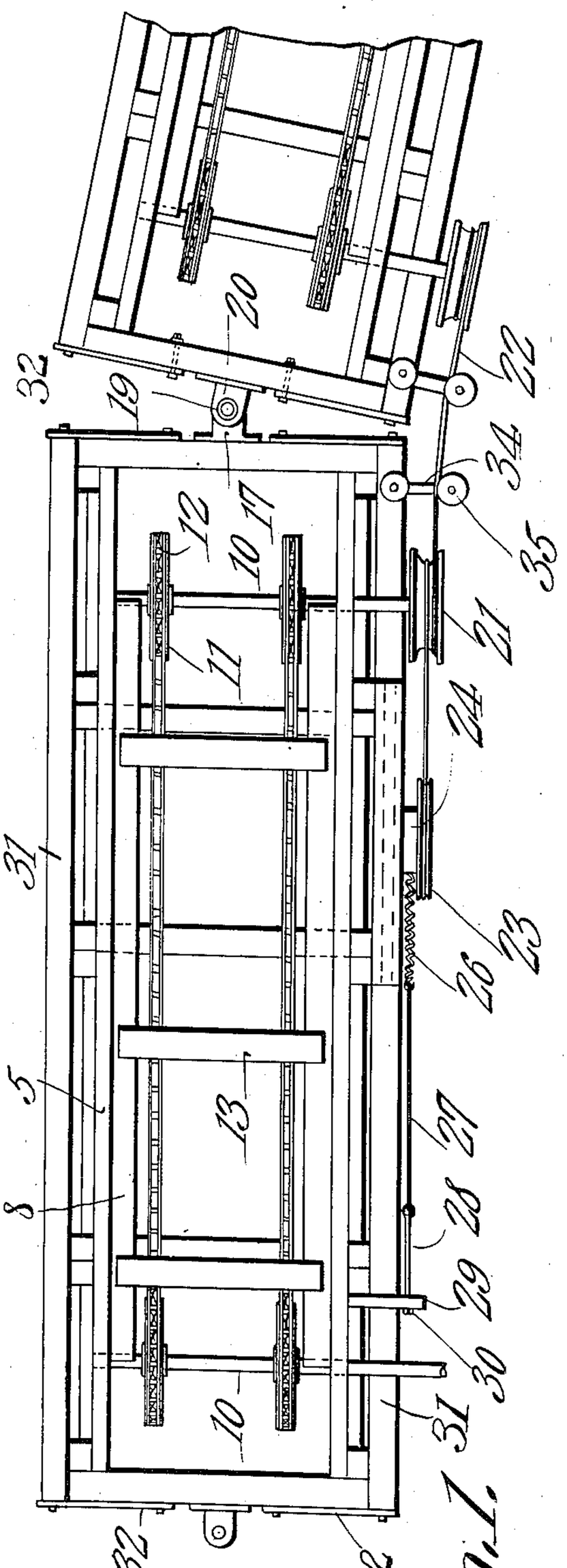

Fig. 1.

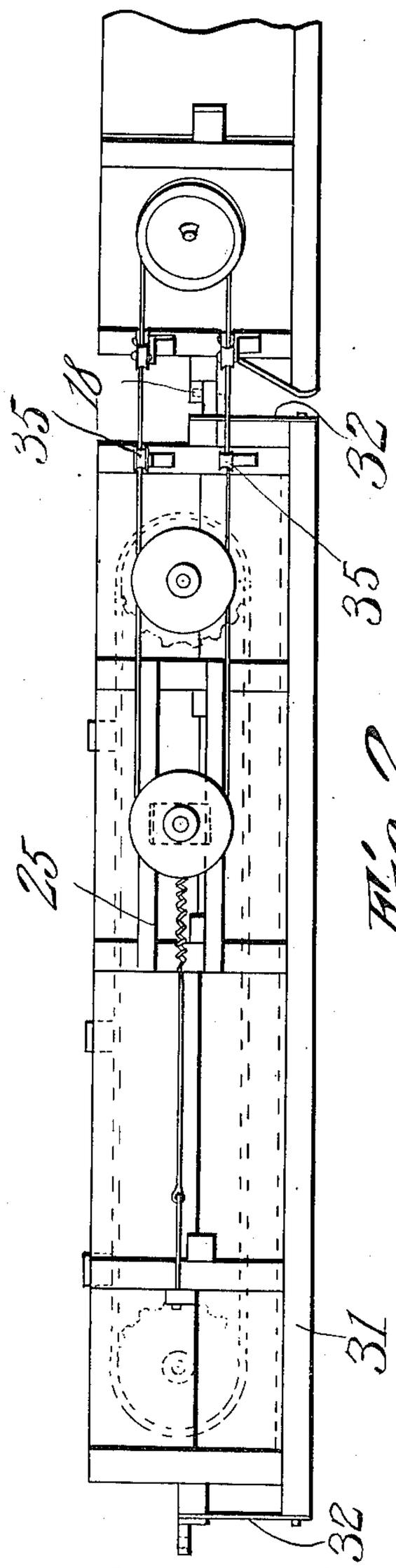

Fig. 2.

Witnesses

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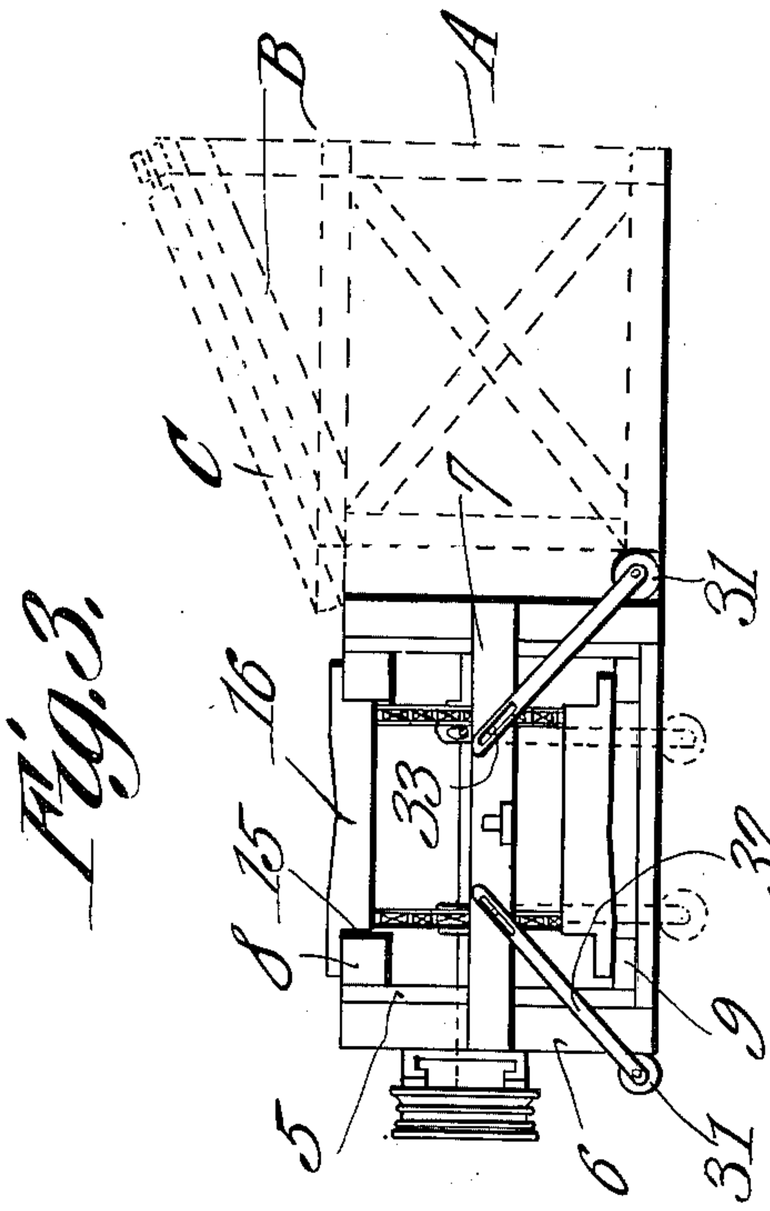

Fig. 3.

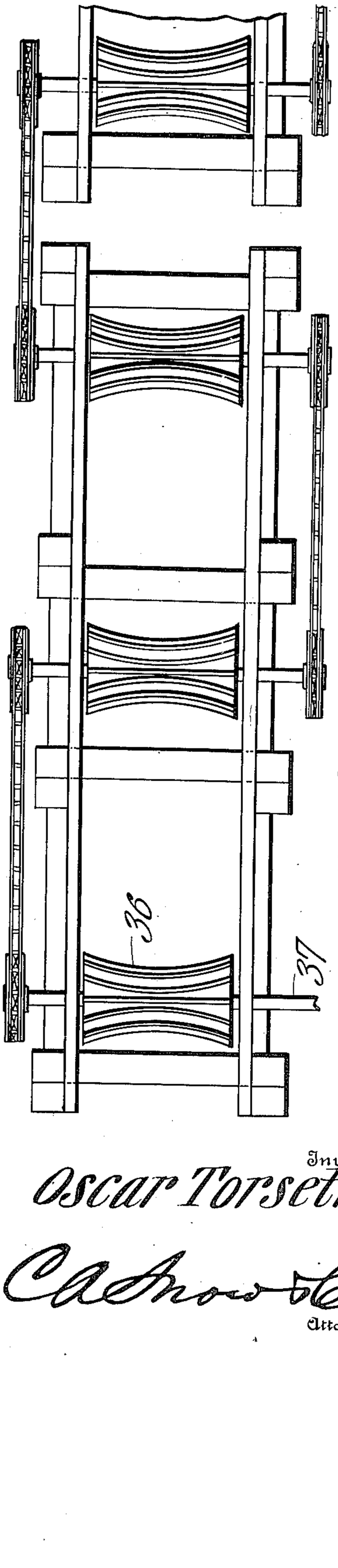

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

OSCAR TORSETH, OF EAU CLAIRE, WISCONSIN.

DEVICE FOR CONVEYING LOGS.

966,489. Specification of Letters Patent. Patented Aug. 9, 1910.

Application filed July 22, 1909. Serial No. 508,967.

To all whom it may concern:

Be it known that I, OSCAR TORSETH, a citizen of the United States, residing at Eau Claire, in the county of Eau Claire and State of Wisconsin, have invented a new and useful Device for Conveying Logs, of which the following is a specification.

It is the object of the present invention to provide an improved construction of device for conveying logs, and the mechanism embodying the present invention is of that general type illustrated in my co-pending application filed March 6, 1909, Serial No. 481,560.

One embodiment of the invention resides in providing a plurality of conveyer sections in each of which is mounted a plurality of corrugated rollers, and in connecting, by gearing, all of the shafts of each of the sections, whereby the rollers of the entire number of sections will be simultaneously rotated to cause the travel along the series of sections of a log disposed upon the rollers.

The invention, also, contemplates the employment, where the rollers are not considered desirable, of endless chains to which are attached cross beams upon which the logs are disposed.

One of the features of the invention resides in the provision of means whereby one of the sections may be disposed upon another and be conveyed thereover as in the case of a log.

In the accompanying drawings:—Figure 1 is a top plan view of a portion of the mechanism embodying the present invention, one entire section and a part of another section being shown, the sections being disposed at an angle one with respect to the other. Fig. 2 is a side elevation of the sections shown in Fig. 1. Fig. 3 is an end elevation thereof, illustrating in dotted lines a device which may be employed in connection with a conveyer for the purpose of preventing accidental discharge of the logs at curves, and so forth, and, Fig. 4 is a view similar to Fig. 1 showing a slight modification of the invention.

Similar numerals of reference indicate corresponding parts throughout the several figures of the drawings.

In the drawings, and more particularly in Figs. 1, 2 and 3 thereof, each of the sections is illustrated as comprised in part of sides 5 which are braced in upright position by uprights 6 secured thereto and mutually connected by cross beams 7, a rectangular open frame being in this manner provided. Secured upon each of the sides 5 of the conveyer frame above described along the upper edges of the said sides are opposed slides 8 and similar slides 9 are in a like manner secured to the sides 5 at the lower edges thereof.

Shafts 10 are journaled for rotation in suitable bearings supported upon the sides 5 of the conveyer frame and these shafts carry sprocket gears which are indicated by the numeral 11, and over which are trained chains 12, each section having mounted therein, preferably, two sets of sprocket gears supporting parallel chains.

Secured upon the two chains of each section are cross beams which are indicated by the numeral 13, and as clearly shown in Fig. 3 of the drawings, these cross beams have their under sides cut away at their ends as at 15 to receive the upper corner edges of the slides 8, the upper sides or edges of the said cross beams at their intermediate portions being concaved as at 16, whereby a log disposed upon the cross beams will not be liable to roll therefrom.

It will be understood from the foregoing that upon power being applied to either of the shafts 10 of any one section, the sprocket chains 12 will be caused to travel in unison, moving the cross beams 13 along in the conveyer frames over the slides 8. As these cross beams pass around the sprocket gears in their return travel, their ends move over the slides 9 and the beams are in this manner supported clear of the ground.

In order that a number of the conveyer sections above described may be connected in a continuous series, each section is provided at one end with a coupling head indicated by the numeral 17, and this head is formed with an upstanding stud indicated by the numeral 18, which stud fits in an opening 19 formed in a head 20 upon an adjacent conveyer section, it being under-

stood that the said adjacent conveyer section has its end carrying the head 20 lifted to a slight degree, whereby the apertured portion of the head may be disposed upon that portion of the head 17 upon which the stud 18 is carried. It will further be understood that this manner of connecting the conveyer sections serves to pivot them whereby they may be positioned at various angles one with respect to another, and further it will be understood that each conveyer section is provided at one end with one of the heads 17, and at its other end with one of the heads 20.

The invention contemplates that power shall be imparted to all of the shafts 10 of the conveyer sections through the medium of suitable gearing operatively connecting the adjacent shafts 10 of connected sections, power being applied initially to one of the shafts 10 at one end of the connected series of conveyer sections. To this end, the shafts at the end of each section are provided each with a cable pulley indicated by the numeral 21 and trained about the adjacent pulleys of each two connected sections is a cable 22, this cable being further passed about a pulley 23 which is journaled upon a block 24 mounted to slide between spaced parallel guides 25 upon one side 5 of one of the connected sections. This block 24 is freely slidable between the guides 25, and has connected to it a spring indicated by the numeral 26, this spring being connected through the medium of a length of cable 27 to one end of a threaded rod 28 which passes through a bracket 29 upon the said side 5 of the conveyer section. By adjusting a nut 30 upon this rod 28, the tension of the spring 26 may be varied, and, also, the block 24 will be adjusted between the guides so as to take up the slack of the cable 22 and exert more or less tension thereon. It will be understood from the above that by providing this means for taking up the slack of the cable 22, the cable will at all times be sufficiently taut to impart motion from one pulley 21 to another, whether the two connected conveyer sections be disposed at an angle substantially as shown in Fig. 1 of the drawings, or at a reverse angle.

As heretofore stated, the invention contemplates the provision of means whereby any one section may be disposed upon any other section and conveyed thereover in the same manner as a log disposed upon the sections, and this means is embodied in rolls 31 which are journaled at their ends at the lower ends of arms 32, which arms have slot and pin connection, as indicated at 33, with the end arms of cross beams 7 of the conveyer frame sections. Ordinarily, the arms are so disposed that the rolls 31 will lie one to each side, or beside each section, as illustrated in full lines in Fig. 3 of the drawings, but when one section is to be conveyed over several other sections, the section to be conveyed is slightly raised, and the arms are swung to vertical position, substantially as illustrated in dotted lines in the said figure of the drawing, in which position the rolls 31 will extend longitudinally beneath the respective sections and assume this position when this section is disposed upon one or several of the conveyer sections, for the purpose of being conveyed thereover. The pin elements of the slot and pin connection had between the arms 32 and the end cross beams 7 are preferably in the form of set screws which may be tightened to secure the arms when swung to vertical position, and thereby prevent dropping of these arms.

In order to prevent the cables 22 leaving their respective pulleys 21, when the conveyer sections are disposed at various angles one with respect to another, brackets 34 are secured upon the conveyer sections at each end thereof, and each side, and upon these brackets are journaled rollers, indicated by the numeral 35, between which rollers the respective cables 22 pass.

In dotted lines of Fig. 3 of the drawing, there is shown, in end elevation, a device which may be employed in connection with the conveyer heretofore described, at curves and angles, this device embodying a frame which is indicated in general by the reference character A and having an inclined upper portion B upon which are journaled a number of rollers C against which the ends of logs being conveyed around the curve may strike, whereby the said logs will be deflected on to the conveyer means of the sections in advance of this device.

In Fig. 4 of the drawings there is illustrated a slight modification of the invention, the conveyer means in this form of the invention being in the nature of corrugated circumferentially concaved rolls 36 mounted upon suitable shafts 37, these rolls taking the place of the cross beams 13 heretofore described, and the chains 12 supporting these cross beams.

What is claimed is:—

1. In mechanism of the class described, conveyer sections, each comprising a frame, log supporting means mounted in the frame, and rollers carried by each section and movable to position to lie at the sides of the sections or to position to lie there beneath, thereby to support the section upon the log conveyer means of a like section.

2. In mechanism of the class described, a plurality of conveyer sections, each comprising a frame having log supporting conveyer means mounted therein, arms pivotally supported at each end of each section,

rollers journaled at their ends in the corresponding arms at the end of each section, and extending lengthwise of the respective sections, the said arms being movable to position to support the rollers at the sides of the sections or beneath the same.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

OSCAR TORSETH.

Witnesses:
A. H. SHOEMAKER,
M. B. HUBBARD.