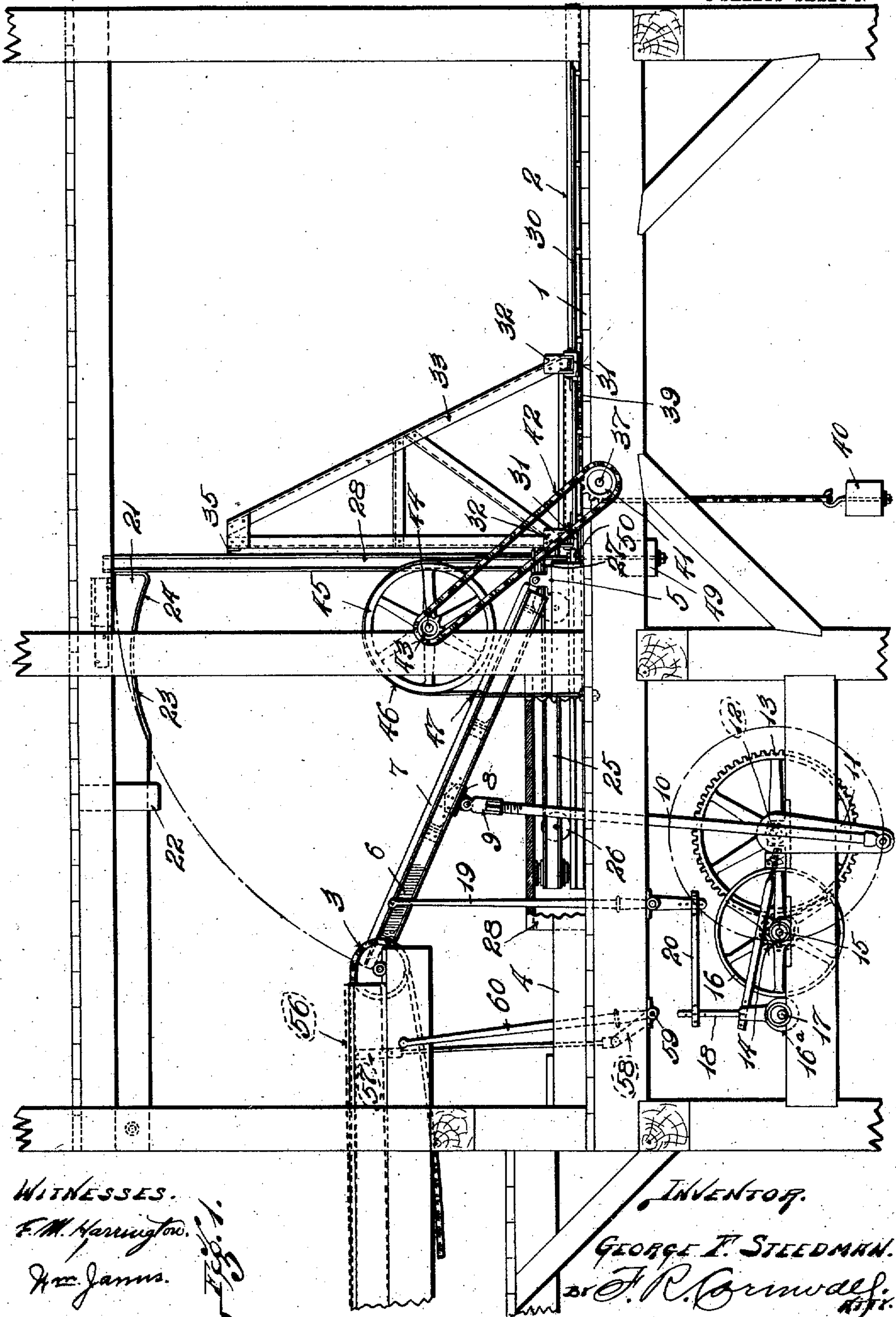


G. F. STEEDMAN.  
EDGE PILING LUMBER STACKER.  
APPLICATION FILED APR. 30, 1910.

987,185.

Patented Mar. 21, 1911.

4 SHEETS-SHEET 1.



WITNESSES.

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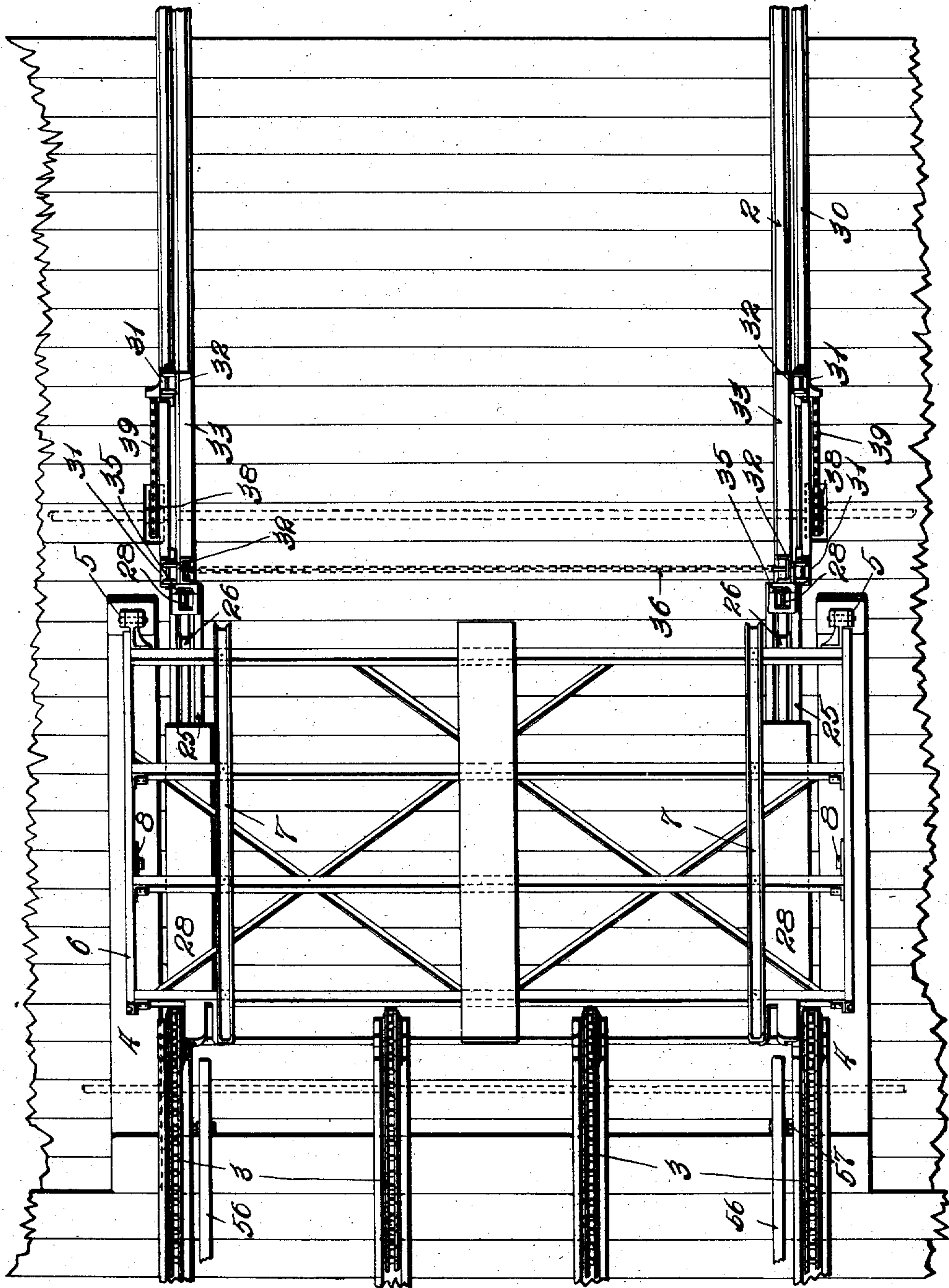
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 APPLICATION FILED APR. 30, 1910.

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Patented Mar. 21, 1911.

4 SHEETS-SHEET 2.



WITNESSES.  
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Fig. 2.

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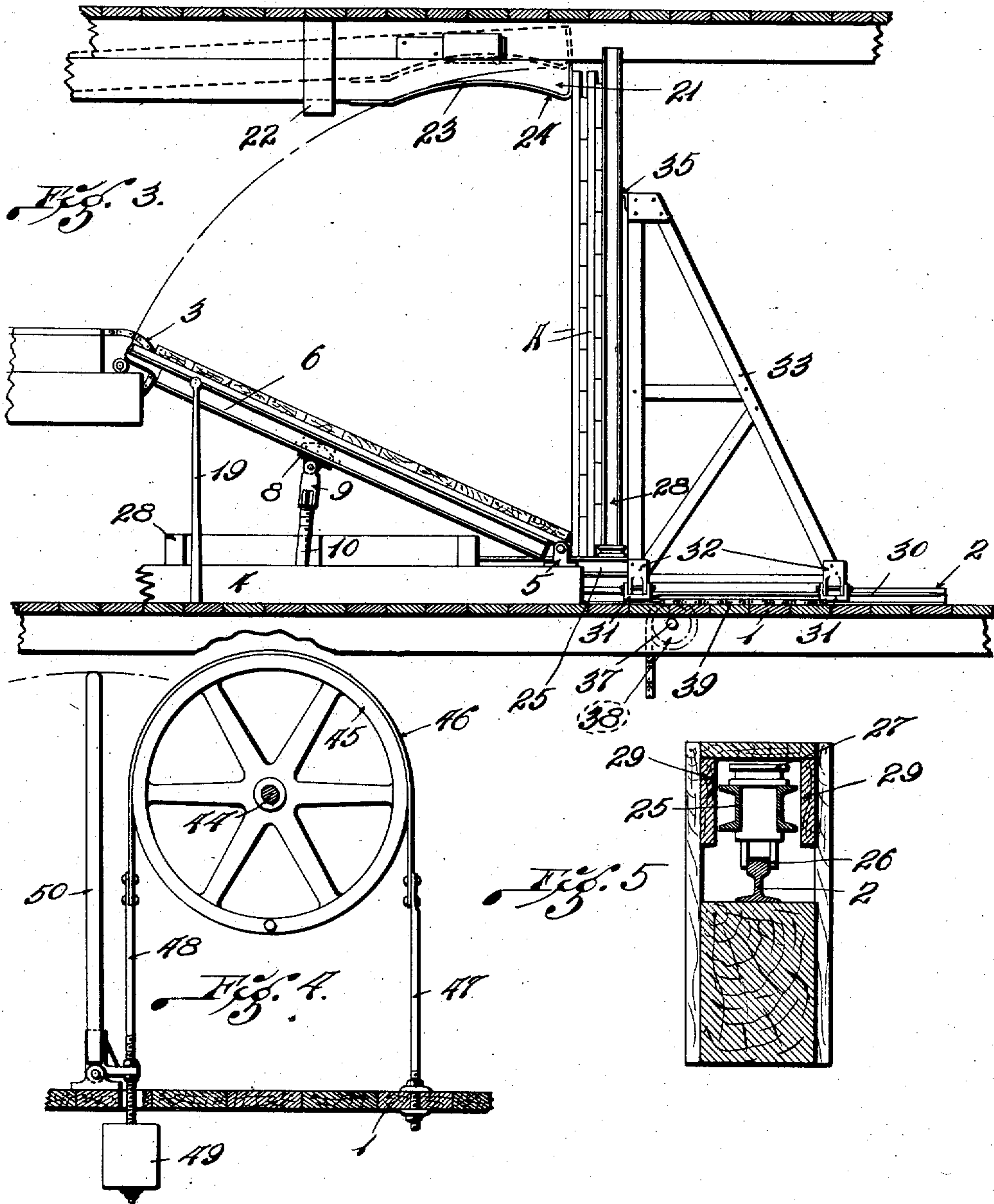


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Patented Mar. 21, 1911.

4 SHEETS—SHEET 3.



WITNESSES.  
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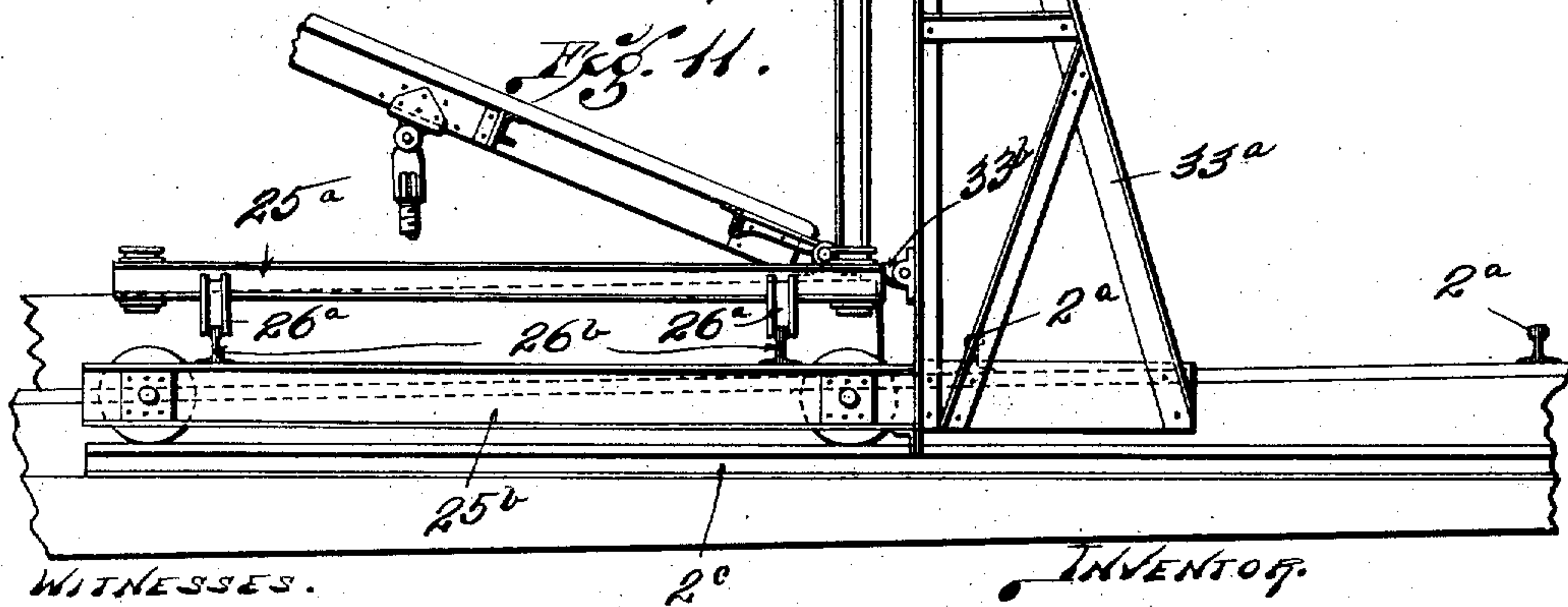
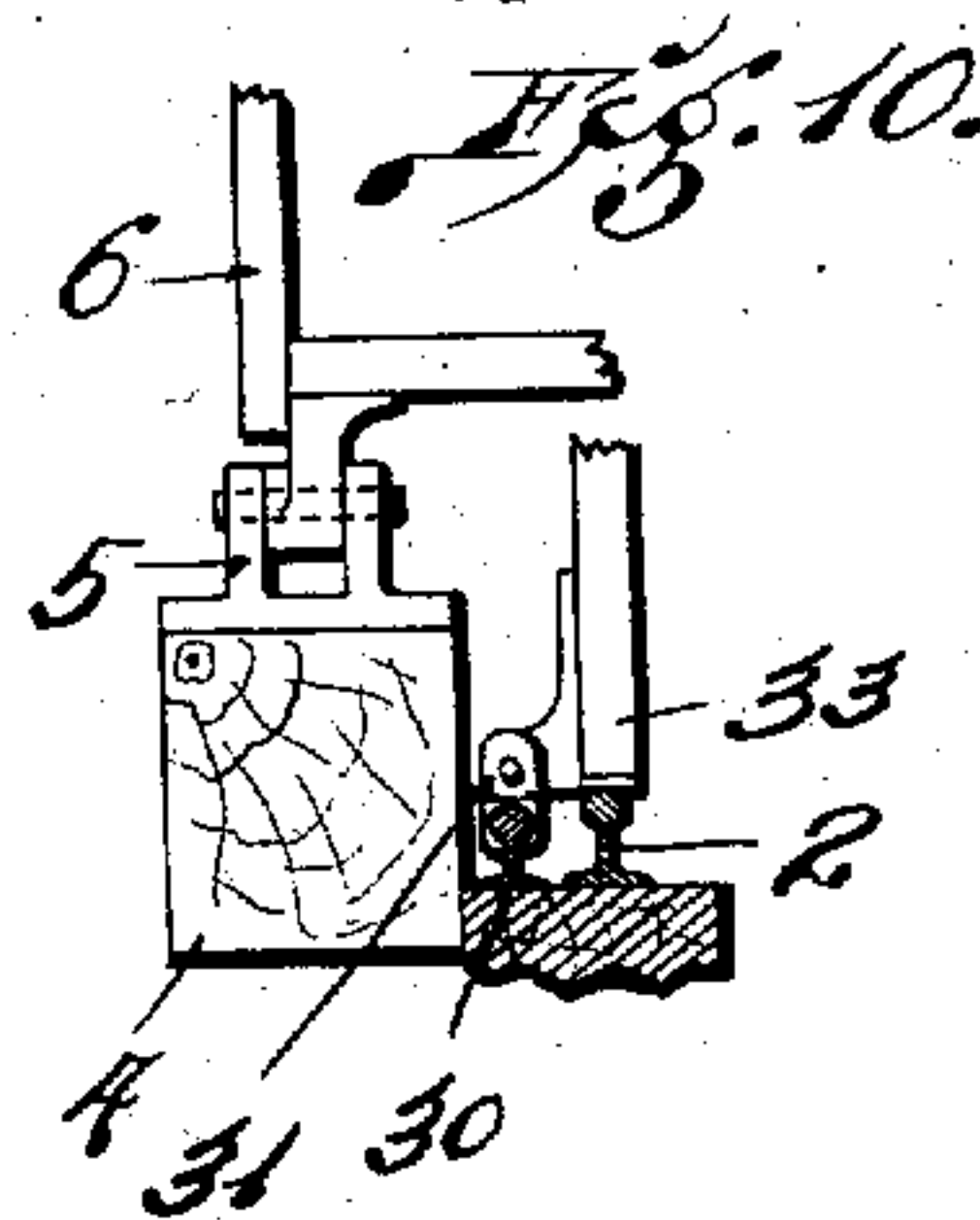
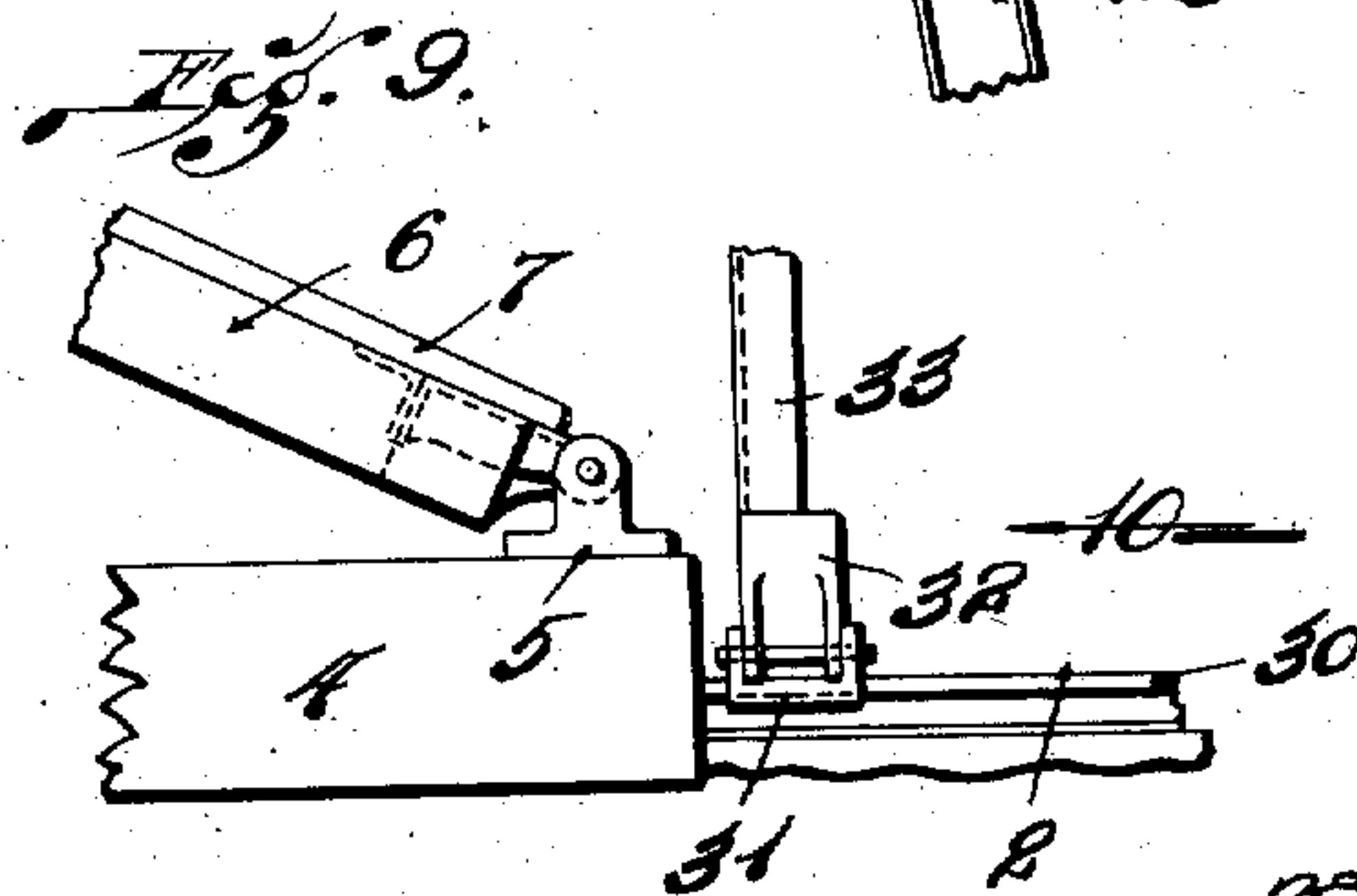
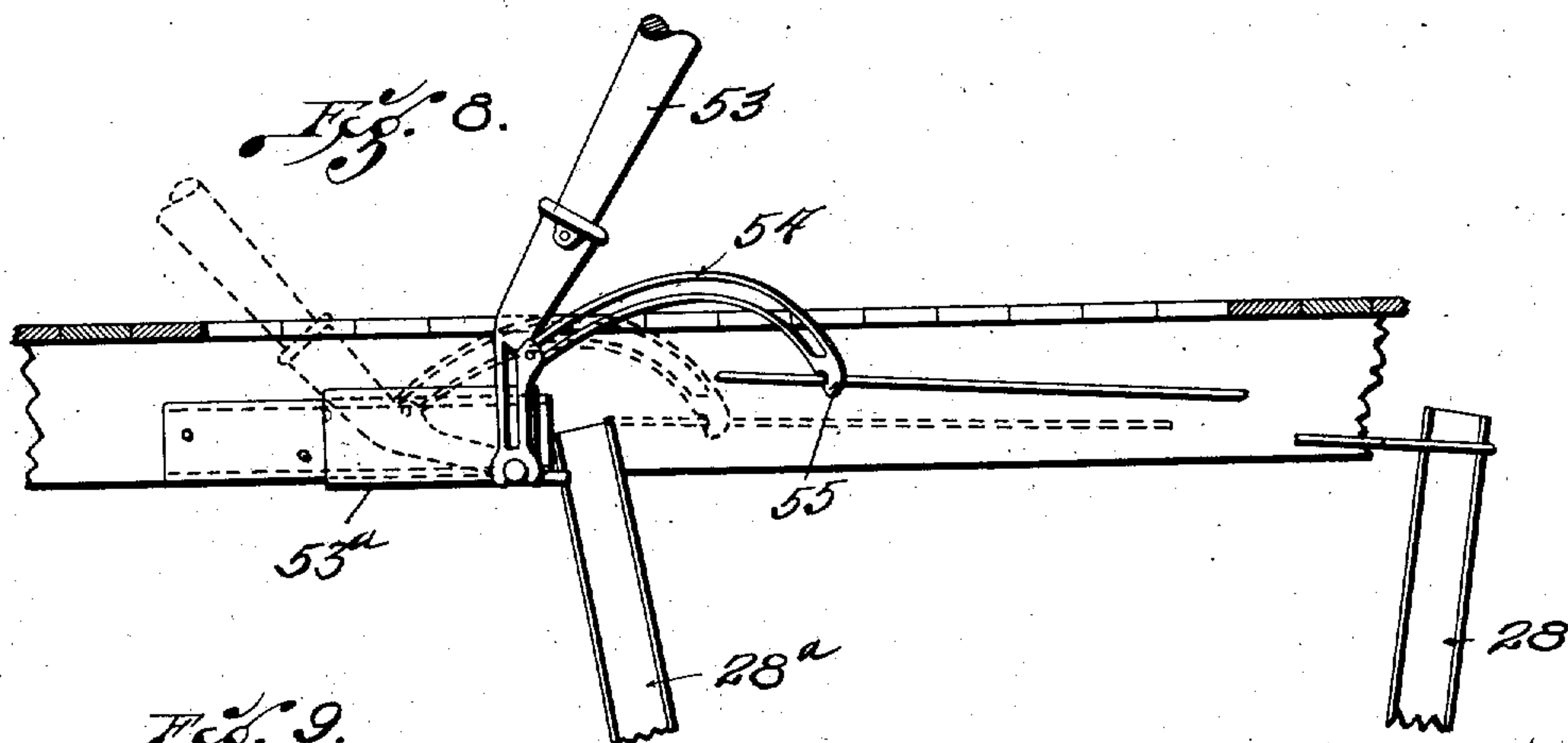
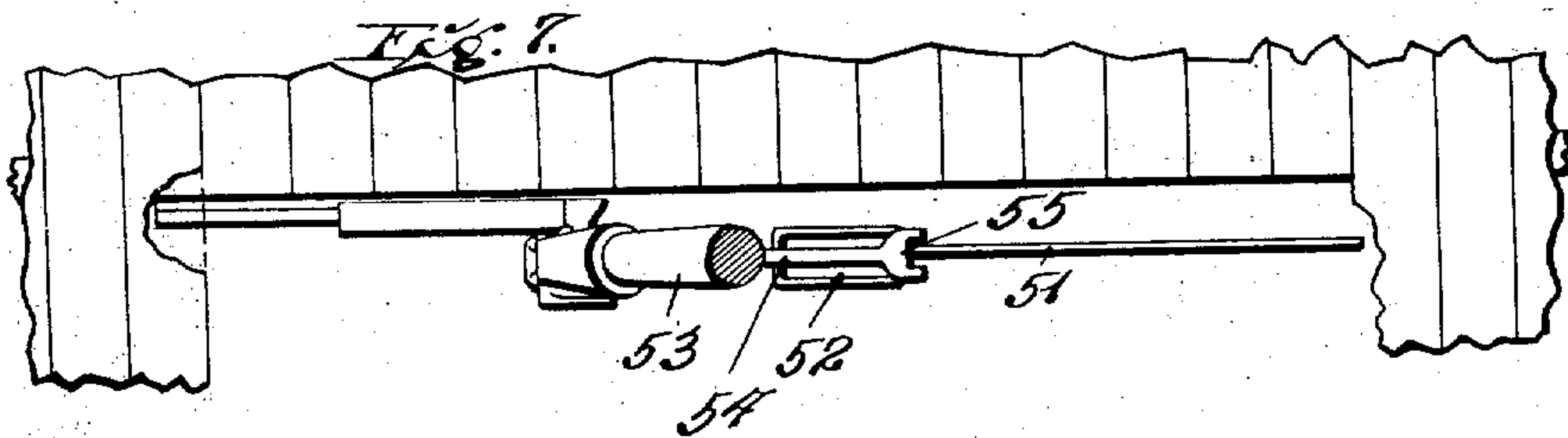
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4 SHEETS—SHEET 4.



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# UNITED STATES PATENT OFFICE.

GEORGE F. STEEDMAN, OF ST. LOUIS, MISSOURI.

EDGE-PILING LUMBER-STACKER.

987,185.

Specification of Letters Patent.

Patented Mar. 21, 1911.

Application filed April 30, 1910. Serial No. 558,686.

*To all whom it may concern:*

Be it known that I, GEORGE F. STEEDMAN, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain  
5 new and useful Improvement in Edge-Piling Lumber-Stackers, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the  
10 same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of a lumber stacker of my improved construction. Fig.  
15 2 is a plan view of the stacker. Fig. 3 is a detail view of a portion of the lumber stacker, and showing the manner in which the lumber is piled on the kiln trucks. Fig. 4 is a detail view of the means employed  
20 for producing tension for the movable stake supports. Fig. 5 is a cross section of one of the housings which receive the rear portions of the trucks when the same are in position to receive the lumber. Fig. 6 is a detail  
25 view of a binder utilized for connecting the pairs of stakes on the trucks after the lumber is loaded onto the said trucks. Fig. 7 is a plan view of the means employed for applying the binders to the upper ends  
30 of the stakes after a load of lumber is positioned on the trucks. Fig. 8 is a side elevation of the binder applying means. Fig. 9 is a detail view of a hinge between the frame of the machine and the piling table. Fig.  
35 10 is an elevation of the parts seen looking in the direction indicated by the arrow 10 in Fig. 9. Fig. 11 is a side elevation of a portion of a modified form of my improved lumber stacker which modified form is used  
40 where the lumber is piled so as to occupy a position parallel with the track leading into the kiln.

My invention relates to an edge piling lumber stacker, to be utilized in connection  
45 with saw mills, my object being to take freshly cut lumber as it comes from the saw mill and stack it on edge with proper piling strips upon trucks so that said lumber can be readily run into a dry kiln.

50 My improved lumber stacker is adapted for piling lumber either crosswise relative to or parallel with the track leading into the dry kiln.

A further object of my invention is to provide simple means whereby the upper  
55 ends of the stakes on the kiln trucks are tied or bound together after said trucks are loaded, thereby holding the load of lumber firmly in position upon the trucks during its passage to the kiln.

60 My invention consists of a table or frame normally occupying an inclined position hinged at its lower end and adapted to receive the lumber from a suitable conveyer, and which frame or table is swung upward  
65 by suitable mechanism to pile the lumber on edge upon trucks, which latter gradually move forward as the lumber is piled thereon.

My invention further consists in certain novel features of construction and arrange-  
70 ment of parts hereinafter more fully described and claimed.

As shown in the accompanying drawings my improved lumber stacker is arranged in  
75 a suitable structure or frame work located between the saw mill and the dry kiln. Arranged in this frame work is a floor 1 and leading therefrom to the dry kiln (not shown) is a track 2 which is traversed by the  
80 kiln trucks.

3 designates an endless conveyer of suitable construction which conveys the freshly cut lumber from the saw mill to the stacker.

Positioned on the flooring 1 at the end of the track 2 is a pair of timbers 4 and hinged  
85 to blocks 5, fixed on top of said timbers is the lower end of a skeleton frame or table 6, which normally occupies an inclined position as shown in Fig. 1, and the upper end of this frame or table is adapted to register  
90 with the endless conveyer 3.

Positioned on top of the frame or table, and extending at right angles to the axes of the hinges thereof are two or more rails  
7 against which are positioned the piling  
95 strips which are interposed between the layers of lumber piled onto the trucks by the apparatus.

Adjustably positioned on the side rails of the frame or table 6 are brackets 8 to which  
100 are pivotally connected tubular sockets 9. Screw seated in said sockets are the upper ends of the connecting rods 10 the lower ends of which are journaled on the wrist pins of cranks 11 formed on a shaft 12,  
105 which latter is journaled for rotation in suit-



able bearings on the frame work beneath the floor or platform 1.

Fixed on the shaft 12 is a gear wheel 13 which meshes with the pinion 14 carried by a shaft 15, which latter is journaled for rotation in suitable bearings, and carries a friction wheel 16. A spur friction 16<sup>a</sup> carried by driven shaft 17 is adapted to engage the periphery of the friction wheel 16, said shaft 17 being mounted in movable bearings actuated by a lever 18. An operating lever 19 is arranged in the frame work above the floor or platform 1 to one side of the table 7, and connecting the lower end of this hand lever with the upper end of lever 18 is a link 20.

Pivotally mounted in the frame work of the apparatus above the endless carrier 3 is a pair of horizontally disposed latch bars 21, the free ends of which are adapted to move vertically and said latch bars operating in loops 22 depending from a portion of the frame work above the table 6. The under sides of the front portions of these latch bars are curved as designated by 23, and said curved portions are provided with rub iron 24. The free ends of these latch bars occupy positions immediately above the hinged edge of the table 6.

The trucks utilized in connection with my improved stacker for conveying the piled lumber from the apparatus into the dry kiln comprises an elongated frame 25, preferably constructed of a pair of channels arranged side by side and suitably framed together, and between which channels are arranged grooved wheels 26, which travel upon the rails of the track 2. Located at each end of the truck is a stake pocket 27 adapted to receive the lower ends of the stakes 28 and 28<sup>a</sup> between which the lumber is piled. These stakes are preferably formed of I-beams cut to the desired length. There is one of these trucks for each rail of the track and built immediately over the ends of the rails beneath the table 6 are housings 29 in which the trucks are positioned while the lumber is being piled thereon, and these housings support the trucks in proper position.

Fixed on the flooring 1 immediately adjacent and just outside the rails of the track 2 are small rails 30 on each of which is arranged to slide a pair of shoes 31. Hinged to these shoes in such manner as to swing outward away from the rails of the track 2 are blocks 32, and fixed to these blocks are the lower ends of a pair of stake supporting frames 33, the upper ends of which are provided with brackets 35, which bear against the stakes 28 seated in the stake pockets in the front ends of the trucks 25. When this pair of stake supports are in position to support the front pair of stakes carried by the trucks their upper ends are connected by a detachable chain 36.

Mounted in suitable bearings in the frame of the apparatus in front of the table 6 is a shaft 37, on which is mounted a pair of sprocket wheels 38 and passing over said sprocket wheels are chains 39 the upper ends of which are attached to the forward lower corners of the stake supporting frames 33. The lower ends of these chains 39 are provided with weights 40, and thus the supports 33 are normally held against the front end stakes 28 carried by the trucks.

Fixed on one end of the shaft 37 is a sprocket wheel 41 and operating thereon is a sprocket chain 42 which passes around a sprocket wheel 43 fixed on the end of a shaft 44, which latter is mounted in suitable bearings on the frame above the table 6. Mounted on this shaft 44 is a friction wheel 45 over which passes a friction band 46 one end of which is connected to a fixed rod 47, and the opposite end being connected to a vertically disposed rod 48 carrying on its lower end a weight 49. This rod 48 is adapted to be moved vertically a short distance to tighten or loosen the band 46 on the friction wheel 45 by means of a hand lever 50 fulcrumed in a suitable bearing on the floor 1.

The mechanism just described provides means, whereby the proper degree of tension or resistance can readily be obtained for opposing the outward movement of the trucks while the lumber is being piled thereon. After the proper number of layers of lumber has been piled on the trucks the rear stakes 28<sup>a</sup> are positioned on the rear stake pockets 27 and the upper ends of said pairs of stakes are now tied together by means of rods 51 provided with loops 52 at their ends, which loops engage over the upper ends of the stakes. When the trucks are loaded with lumber the rear stakes 28<sup>a</sup> by reason of the pressure of the load of lumber will be sprung backward at their upper ends, and in order to bring these stakes into vertical positions, and to permit the tie rods to be placed over the upper ends of said stakes I employ the binding apparatus shown in Figs. 7 and 8. This apparatus comprises a hand lever 53 fulcrumed to a slide 53<sup>a</sup> on the frame of the apparatus above the free ends of each of the latch bars 21 and pivotally carried by each lever is a forwardly projecting curved arm 54, the outer end of which is bifurcated and provided with hooks 55 which engage beneath one of the loops 52 on the binding rod 51. The opposite loop of this binding rod is engaged over the front stake 28, and when the hand lever 53 is swung rearward the binding rod acts as a connecting rod to draw the upper ends of the pair of stakes toward one another a sufficient distance to permit the loop on the end of the rod 51 which is engaged by the hooks 55 to drop over the corresponding one of the stakes 28<sup>a</sup>;



thus the binding stakes are tied together, and in such condition said load of lumber is moved into the dry kiln.

To temporarily stop the delivery of lumber onto the table 6 by the endless conveyer 3 a pair of horizontally disposed stop bars 56 are pivotally mounted on the table over which the endless conveyer 3 operates, said stop bars being connected to the upper ends of vertically disposed rods 57, the lower ends of which are pivotally connected to cranks 58 carried by a rock shaft 59 journaled in the frame of the apparatus, and which rock shaft is actuated by means of a hand lever 60.

The operation of my improved lumber stacker is as follows: A truck 25 is positioned in each housing 29, and a piling stake 28 is seated in the forward one of the stake pockets of each truck. The stake supporting frames 33 are swung into vertical positions with their upper ends tied together by the chain 36 and said supports are moved along the rails 30 until said supports bear against the front ends of the trucks and the front sides of the piling stakes. A piling strip A is now positioned against each one of the rails 7, and the lumber carried by the endless conveyer 3 is delivered to the upper end of the table 6, and slides downward to the lower end of said table over the piling strips positioned thereon. When the table is covered with a single layer of the pieces of lumber an operator stationed to the side of the table 6 actuates the hand lever 60, thus elevating the stop bars 56 and by so doing cuts off the further delivery of lumber to the table 6. (See dotted lines Fig. 1). The hand lever 19 is now manipulated to bring the surface of the spur friction 16<sup>a</sup> into engagement with the periphery of the friction wheel 16, and thus the rotary motion of the driving shaft 17 is imparted to said friction wheel 16, and said rotary motion is transmitted by means of the pinion 14 and gear wheel 13 to the shaft 12 on which the cranks 11 are mounted. Normally these cranks stand at their lowermost limit of movement as shown in Fig. 1, and when the shaft 12 is rotated said cranks swing upward, which action elevates the rods 10 and consequently swings the table 6 upward into a vertical position immediately to the rear of the piling stakes 28. As the table 6 is thus moved upward the upper ends of the piling strips bear against the rub irons 24 on the latch bars 21, thus elevating the free ends of said latch bars, and when the table reaches a vertical position the free ends of said latch bars drop downward with their free ends bearing directly behind the upper ends of the piling strips carried by said table beneath the layer of lumber thereon. As the shaft 12 continues to rotate the table returns to its normal position thus leaving a layer of lumber against the piling stakes

28, and held in position thereagainst by the piling strips, the upper ends of which are engaged by the free ends of latch bars 21. As the table has been thus elevated and returns to its normal position the hand lever 19 is released to break the driving connection from the shaft 17 to the shaft 12 after which piling strips are located immediately adjacent the rails 7, and the hand lever 60 is now manipulated to lower the stop bars 56 which permits the lumber to discharge from the endless carrier onto the table, and to fill the same in the manner hereinbefore described. These operations are repeated each time a layer of lumber accumulates on the table 6 and each time said table is elevated the trucks 25 and piling stakes 28 are moved forward a distance equal to the thickness of the pieces of lumber, which forward movement is opposed by the stake supports 33 to which are attached the weighted chains 39. To increase the resistance or pressure offered by the stake supports the friction wheel 45 and band 46 are provided and when the band is tightened on said wheel by a manipulation of the hand lever 50 the resistance resulting from said friction is transmitted to the shaft 37 by means of the sprocket chain 42, and such resistance is transmitted to the stake supports 33. As the lumber is piled onto the trucks in the manner hereinbefore described said trucks and the stake supports are moved forwardly step by step until the trucks are filled after which a pair of piling stakes 28<sup>a</sup> are seated in the rear pair of stake pockets 27. The upper ends of the stakes 28 and 28<sup>a</sup> are now tied together with the tie rods 51 in the manner hereinbefore described, after which the chain 36 is detached from the upper ends of the supports 33, and said supports are swung outward and downward upon their hinges in order to permit the trucks carrying the load of lumber to move along the track 2 into the dry kiln.

Lumber piled by means of my improved apparatus is transversely disposed upon the trucks, and the individual pieces of lumber are all arranged on edge. This manner of piling or stacking lumber is very desirable where the lumber is to be placed in a dry kiln, and the piling strips arranged between the layers of lumber provides for the free circulation of air throughout the entire load of lumber.

The upper ends of the connecting rods 10 are adjustable in the sockets 9, and the brackets 8 to which said sockets are attached are adjustable on the table 6, which adjustment is very desirable and essential, inasmuch as, an accurate regulation of the vertical swing of the table can be readily obtained, and it is necessary that the table in its normal position shall register properly with the endless carrier and when said table



is swung upward it is essential that its upper end shall move just far enough to permit the free ends of the latch bars 21 to drop back of the upper ends of the piling strips and rest on the upper edge of said table.

A lumber stacker of my improved construction is comparatively simple, very rapidly performs the work required, can be operated with comparatively little power, very evenly and compactly piles the lumber on the trucks, and the operation of the apparatus is readily controlled.

In Fig. 11 I have shown a form of apparatus adapted for stacking or piling the lumber so that the same occupies a position parallel with the track leading to the kiln, and where such construction is made use of the stacker is arranged at right angles to the track 2<sup>a</sup>, which leads to the kiln, and the truck 25<sup>a</sup> on which the lumber is piled has its traction wheels 26<sup>a</sup> arranged crosswise relative to the length of said trucks instead of parallel thereto, as is the case in the trucks of the cross stacker hereinbefore described. The traction wheels 26<sup>a</sup> rest upon short rails 26<sup>b</sup>, carried by an auxiliary truck 25<sup>b</sup>, which latter is arranged to move upon a short track 2<sup>c</sup> arranged at right angles to the track 2<sup>a</sup>. In this form of apparatus the auxiliary truck 25<sup>b</sup> is moved along the track 2<sup>c</sup> after the truck 25<sup>a</sup> is loaded, and when the rails of the track 26<sup>b</sup> register with the rails of the track 2<sup>a</sup> the loaded truck 25<sup>a</sup> with the lumber piled so that it occupies a position parallel with the kiln is run onto the track 2<sup>a</sup> which leads into said kiln. The stake supporting frames 33<sup>a</sup> in this form of apparatus are provided on their front sides with movable cams 33<sup>b</sup> which normally bear against the front pair of piling stakes 28 and the front ends of the trucks 25<sup>a</sup>, and when the truck 25<sup>a</sup> is to be moved off the auxiliary truck 25<sup>b</sup> the cams 33<sup>b</sup> are swung upward away from the piling stakes 28 and trucks 25<sup>a</sup>, thereby permitting the same to move freely off the rails 26<sup>b</sup> onto the track rails 2<sup>a</sup>, which lead to the kiln. In this form of apparatus the piling frames 33<sup>a</sup> are not arranged so as to swing downward out of the way of the lumber receiving trucks, but said piling frames are rigidly fixed to the front ends of the auxiliary trucks 25<sup>b</sup>.

It will be readily understood that minor changes in the form and construction of the various parts of my improved lumber stacker can be made and substituted for those herein shown and described without departing from the spirit of my invention.

I claim:—

1. In a cross piling lumber stacker, the combination with a conveyer, of a hinged table for receiving lumber from the conveyer, means whereby said table is elevated, trucks for receiving the lumber from the

table, piling stakes adapted to be positioned on the trucks, and movable piling stake supports adapted to bear against a pair of said piling stakes, and to oppose the outward movement of said stakes, and trucks during the lumber piling operation.

2. In a cross piling lumber stacker, the combination with a conveyer, of a hinged table for receiving lumber from the conveyer, means whereby said table is elevated, trucks for receiving the lumber from the table, piling stakes adapted to be positioned on the trucks, movable piling stake supports adapted to bear against a pair of said piling stakes, and to oppose the outward movement of said stakes and trucks during the lumber piling operation, and tension means connected to said stake supports.

3. In a cross piling lumber stacker, the combination with a hinged piling table, of trucks arranged to traverse tracks leading to the dry kiln, piling stakes adapted to be positioned on said trucks, sliding stake supports adapted to bear against the trucks at one end and the corresponding piling stakes, and tension means connected to said stake supports.

4. In a cross piling lumber stacker, the combination with a hinged piling table, of trucks arranged to traverse tracks leading to the dry kiln, piling stakes adapted to be positioned on said trucks and sliding stake supports adapted to bear against the trucks at one end and the corresponding piling stakes, and which stake supports are adapted to be swung downwardly out of the path of travel of the trucks and the stakes carried thereby.

5. In a cross piling lumber stacker, the combination with a hinged piling table, of trucks arranged to traverse tracks leading to the dry kiln, piling stakes adapted to be positioned on said trucks, sliding stake supports adapted to bear against the trucks at one end and the corresponding piling stakes, which stake supports are adapted to be swung downward out of the path of travel of the trucks and the stakes carried thereby, and tension means connected to said stake supports.

6. In a cross piling lumber stacker, the combination with a hinged piling table, of trucks operating on tracks leading to the dry kiln and adapted to receive lumber from the piling table, stake pockets arranged at the ends of said trucks and adapted to receive piling stakes, a means for drawing the upper ends of two opposite piling stakes together consisting of a lever, a sliding member engaging one piling stake on which the lever fulcrums, and a tension member connected to the lever arranged to pull on a binding link.

7. In a cross piling lumber stacker, the combination with a hinged piling table, of



trucks operating on tracks leading to the dry kiln and which trucks are adapted to receive the lumber from the piling table, piling stakes detachably positioned in the ends of the trucks, and means for opposing the outward movement of the trucks as the lumber is piled thereon, and which means is adapted to be moved out of the path of travel of the trucks after the same are loaded.

8. In a cross piling lumber stacker, the combination with a piling table of trucks adapted to receive the lumber from the table, piling stakes carried by said trucks, tie rods for uniting the upper ends of said stakes, a means for drawing together the upper ends of two opposite piling stakes consisting of a lever, a sliding member engaging one piling stake on which the lever fulcrums, and a tension member connected to the lever and adapted to engage the tie rods.

9. In a cross piling lumber stacker, the combination with a hinged table, of trucks adapted to receive the lumber from the table, piling stakes carried by said trucks, piling stake supports arranged to hold said stakes upright relative to said trucks, a tension device to yieldably restrain the trucks in their movement away from the piling table, tie rods for uniting the upper ends of said stakes, and means whereby said tie rods are applied to the upper ends of the piling stakes.

10. In a cross piling lumber stacker, the combination with a hinged piling table, of trucks adapted to receive the lumber from the table, piling stakes carried by said trucks, means to yieldably restrain the trucks in their movement away from the piling table, means whereby the upper ends of said stakes are drawn toward one another after the truck is loaded to locate the tie rods on said piling stakes.

11. In a cross piling lumber stacker, the combination with a hinged piling table, of trucks adapted to receive the lumber from the table, piling stakes carried by said trucks, gravity latch bars arranged above the piling table and adapted to engage the upper ends of the piling strip arranged between the layers of lumber piled onto the trucks, and a binding means arranged to pull together the upper ends of two opposite piling stakes.

12. In a cross piling lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from the table, piling stakes carried by said trucks, and gravity latch bars pivotally mounted above the piling table for engaging the upper ends of the piling strips arranged between the layers of lumber piled on the trucks, and which latch bars are engaged by the free ends of the piling strips and moved out of the path of travel thereof.

13. In a cross piling lumber stacker, a hinged piling table, tracks leading there-

from to the dry kiln, trucks operating on said tracks which trucks receive the lumber from the piling table and housings in which portions of the trucks are arranged while the lumber is being piled on said trucks.

14. In a cross piling lumber stacker, the combination with a hinged piling table, of means whereby said table is swung upward and a portion of which means is adjustable in order to regulate the length of swinging movement of said table.

15. In a cross piling lumber stacker, the combination with a hinged piling table, of means for swinging said table upon its hinge, which means includes a rotating shaft, cranks on said shaft, and adjustable connecting rods between said cranks and the table.

16. In a cross piling lumber stacker, the combination with a hinged piling table, of means for swinging said table upon its hinge, which means includes a rotating shaft, cranks on said shaft, and connecting rods the upper ends of which are adjustably connected to the table by means of attachment pieces which are adjustable toward or away from the hinge.

17. In a cross piling lumber stacker, the combination with a lumber conveyer, of an inclined hinged piling table adapted to receive lumber from the conveyer, means whereby the angular position of said table can be adjusted to vary the length of movement of said table, and trucks adapted to receive the lumber from the piling table.

18. In a cross piling lumber stacker, the combination with a lumber conveyer, of a hinged piling table which receives the lumber from the conveyer, trucks adapted to receive the lumber from the piling table, means whereby the lumber is supported on the trucks while being piled thereon, and means whereby yielding pressure is brought to bear against the forward ends of the trucks to oppose their forward movement while the lumber is being piled thereon, which last mentioned means is detachably connected to the trucks so that it may be disconnected therefrom to permit the passage of the trucks away from the stacker.

19. In a cross piling lumber stacker, the combination with a piling table, of trucks adapted to receive lumber from the piling table, yielding pressure means bearing against the forward ends of the trucks while the lumber is being piled thereon, said last mentioned means being detachably connected to the trucks in order that it may be disconnected therefrom to permit said trucks to move away from the stacker, and means whereby the successive layers of lumber are supported as they are piled onto the trucks.

20. In a cross piling lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from the



piling table, stakes arranged on said trucks, yielding supporting means adapted to bear against the front pair of stakes for opposing the outward movement of the trucks during the loading of lumber onto said trucks, which yielding supporting means is adapted to be removed from the path of travel of the trucks when said trucks are loaded, and means for drawing the opposite piling stakes together for the purpose of placing binders thereon.

21. In a cross piling lumber stacker, the combination with a piling table, of trucks adapted to receive the lumber from the table, piling stakes carried by said trucks, a tension device for yieldably holding the trucks up to the piling table, and supporting devices for holding the piling stakes perpendicular to the trucks, said devices being so arranged that they may be swung out of the path of the loaded trucks.

22. In a cross piling lumber stacker of the type described, a device for binding the upper ends of two opposite piling stakes consisting of a member engaging the upper end of one of the piling stakes, a lever fulcrumed to said member, a hinged claw on said lever arranged to grasp a binding means and forcibly draw the stakes together.

23. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from the piling table, and auxiliary trucks supporting the first mentioned trucks while the lumber is being piled thereon.

24. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from the piling table, auxiliary trucks supporting the first mentioned trucks while the lumber is being piled thereon, and yielding means for opposing the outward movement of the auxiliary trucks while the lumber is being piled on the first mentioned trucks.

25. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from the piling table, auxiliary trucks upon which the first mentioned trucks are mounted, and which first mentioned trucks move substantially at right angles to the movement of the auxiliary trucks.

26. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from the piling table, auxiliary trucks upon which the first mentioned trucks are mounted, which first mentioned trucks move substantially at right angles to the movement of the auxiliary trucks, and yielding means for opposing the outward movement of the auxiliary trucks while the lumber is being piled on to the first mentioned trucks.

27. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from said piling table, aux-

iliary trucks adapted to support the first mentioned trucks, and transversely disposed rails on the auxiliary trucks which rails receive the wheels of the first mentioned trucks.

28. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from said piling table, auxiliary trucks adapted to support the first mentioned trucks, transversely disposed rails on the auxiliary trucks which rails receive the wheels of the first mentioned trucks, means for supporting the lumber piled on to the first mentioned trucks, and yielding means for opposing the outward movement of the auxiliary trucks while lumber is being piled on to the first mentioned trucks.

29. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from the piling table, the axes of the wheels of which trucks are arranged substantially at right angles to the length of said trucks, and auxiliary trucks supporting the first mentioned trucks.

30. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from the piling table, the axes of the wheels of which trucks are arranged substantially at right angles to the length of said trucks, auxiliary trucks supporting the first mentioned trucks, and yielding means for opposing the outward movement of the auxiliary trucks while lumber is being piled on to the first mentioned trucks.

31. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from said piling table, auxiliary trucks adapted to support the first mentioned trucks, squaring frames positioned in front of the lumber receiving trucks, and movable means on said squaring frames adapted to engage the piling stakes located on the lumber receiving trucks.

32. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from said piling table, auxiliary trucks adapted to support the first mentioned trucks, piling stake supports normally positioned in front of the trucks, and cams on the supports for engaging a pair of the piling stakes positioned on the lumber receiving trucks.

33. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from said piling table, piling stakes adapted to be positioned on the trucks, piling stake supports in front of the trucks, and movable means on the supports for engaging the piling stakes while the lumber is being piled on the trucks.

34. In a lumber stacker, the combination with a hinged piling table, of trucks adapted to receive lumber from said piling table, auxiliary trucks adapted to support the first mentioned trucks, transversely disposed rails on the auxiliary trucks, which rails receive



the wheels of the first mentioned trucks, piling stake supports carried by the auxiliary trucks, and movable means on the piling stake supports for engaging the piling stakes  
5 positioned on the lumber receiving trucks.

35. In a lumber stacker, a hinged piling table, an auxiliary truck adapted to receive the truck on which the lumber is piled, a tension device for yieldingly holding the  
10 truck against movement away from the piling table, piling stake supports carried by

the auxiliary truck and movable means on the piling stake supports for engaging the lumber receiving trucks and the piling stakes carried thereby.

15

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 26th day of April, 1910.

GEORGE F. STEEDMAN.

Witnesses:

JOHN S. REEDER,

WILLIAM F. HARRISON.

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

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