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PATENTED AUG. 11, 1903.

J. H. HISSONG.
CONVEYER ATTACHMENT FOR THRESHING MACHINES.

APPLICATION FILED APR. 16, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

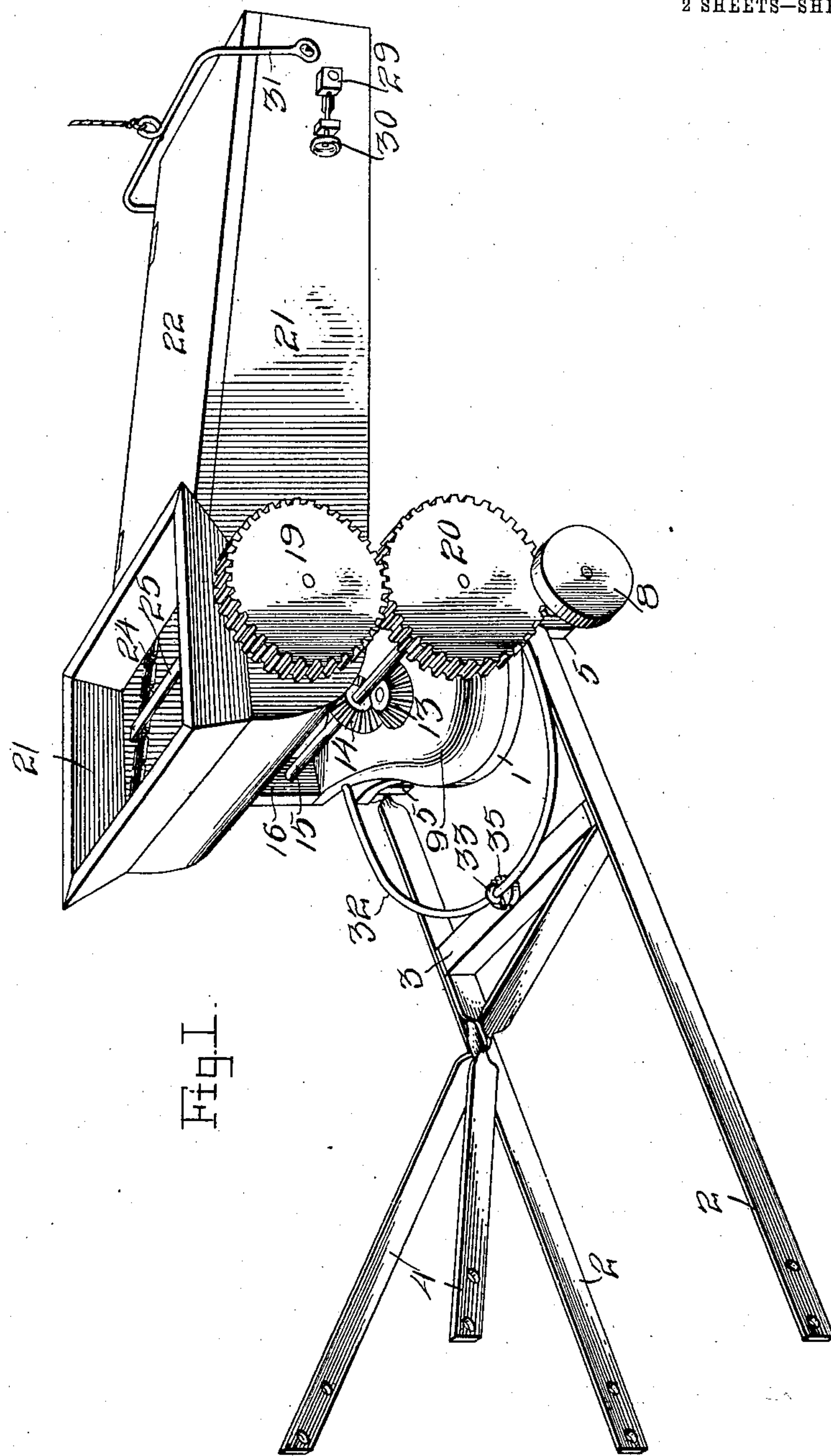


Fig. 1.

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Witnesses

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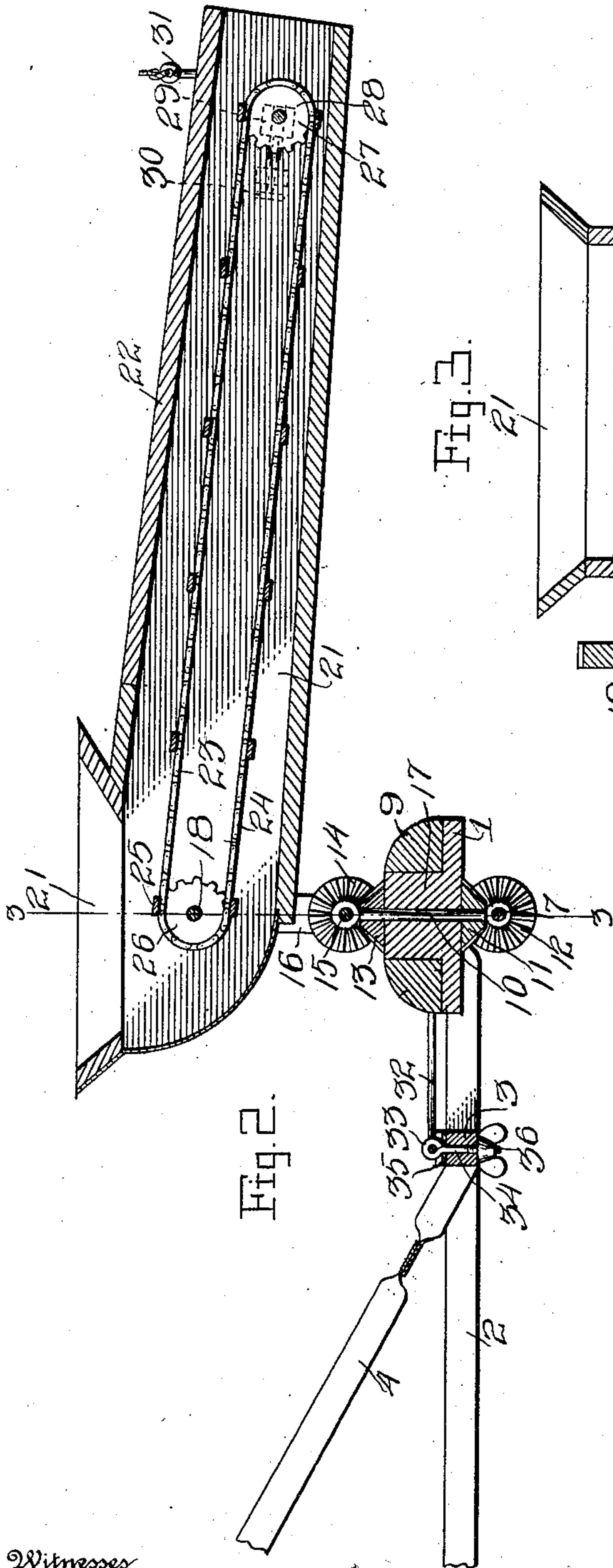


Fig. 2.

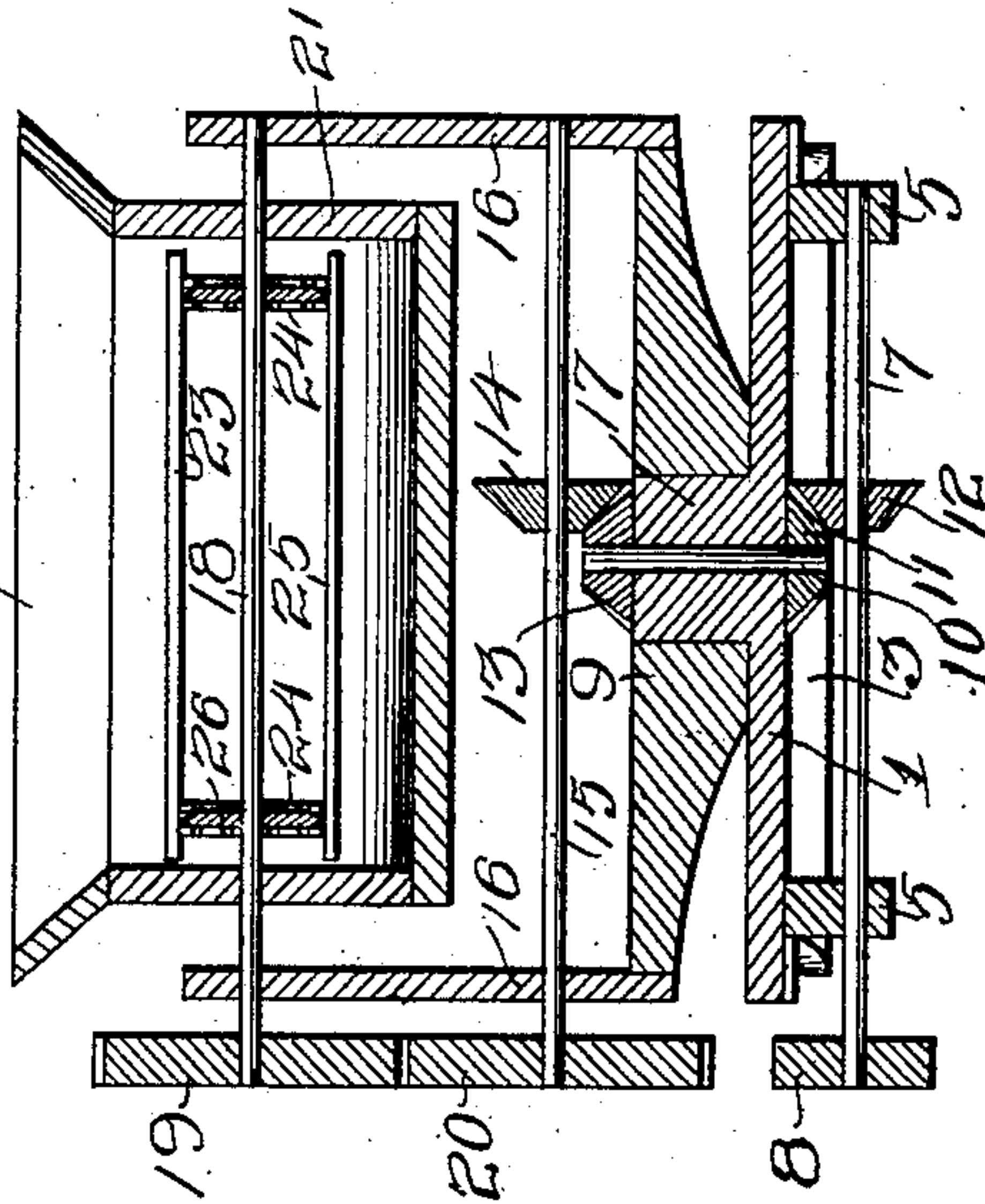


Fig. 3.

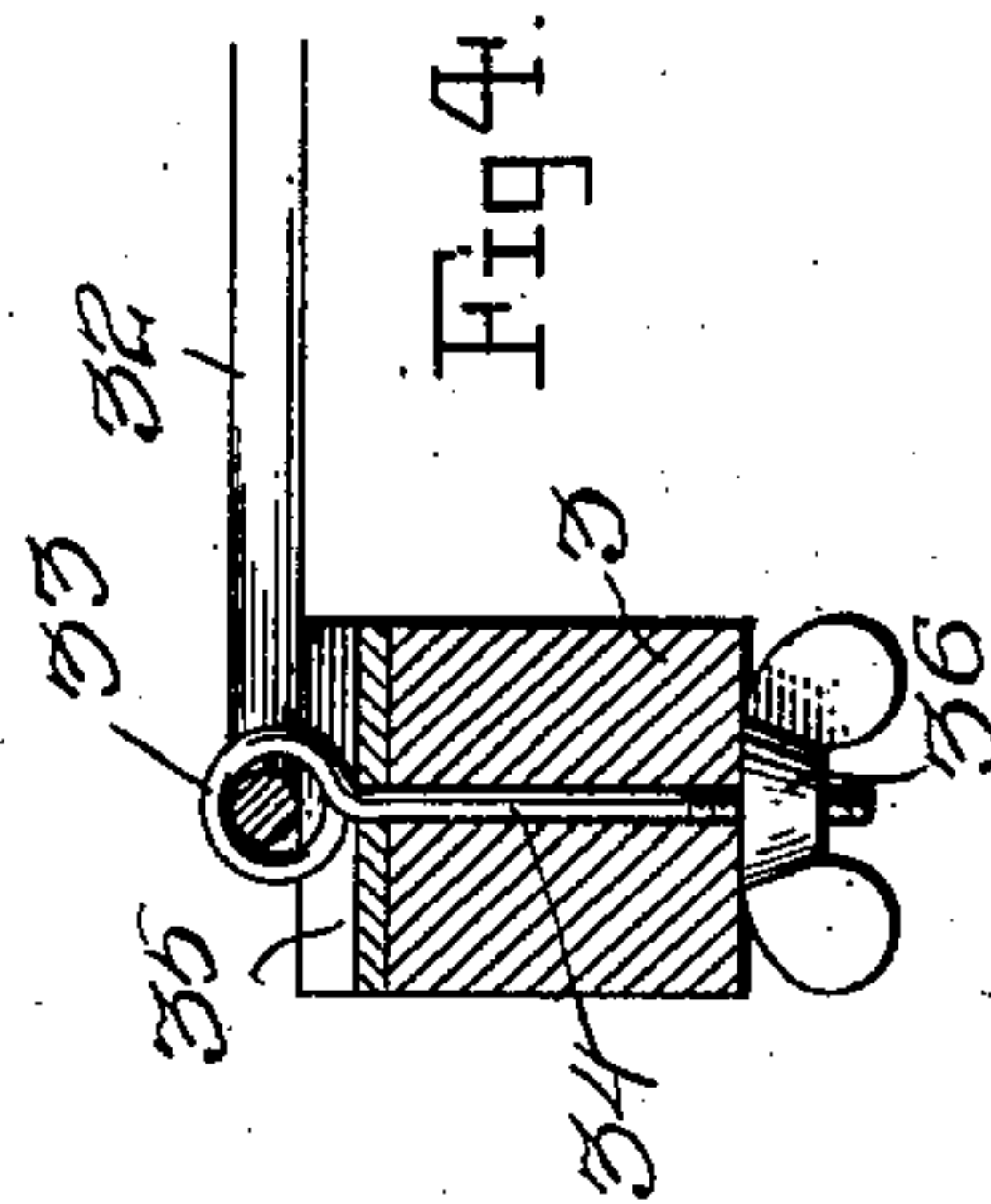


Fig. 4.

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CONVEYER ATTACHMENT FOR THRESHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 735,875, dated August 11, 1903.

Application filed April 16, 1903. Serial No. 152,894. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. HISSONG, a citizen of the United States, residing at Albert Lea, in the county of Freeborn and State of Minnesota, have invented certain new and useful Improvements in Conveyer Attachments for Threshing-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in conveyers for grain-threshing machines.

The purpose of the invention is to provide a conveyer by means of which the refuse or unthreshed grain may be conveyed and fed back into the cylinder of the threshing-machine from the return-elevator of the same.

The object of the invention is to produce a device of this description which is simple in construction, durable in use, positive and efficient in operation, and adapted for various adjustments.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a vertical longitudinal sectional view through the same. Fig. 3 is a vertical cross-sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a detail sectional view.

Referring to the drawings by numerals, 1 denotes a base which acts as the lower stationary member of a turn-table and which is firmly supported from the return-elevator of a threshing-machine by the parallel bars or arms 2, which are spaced apart by the cross-bar 3 and strengthened by the crossed braces 4. Upon the under side at each end of the base 1 the bearing-boxes 5 are provided, in which the shaft 7 is journaled. Said shaft carries upon one of its ends the fixed pulley or belt-wheel 8, which may be connected by a belt with the gearing of the machine.

9 denotes the upper member or revolving plate of the turn-table, which is mounted and revolves upon the base 1. The vertical shaft

10, which projects through the base and revolving plate 9 and forms the axis of the turn-table, is provided upon its lower end with a beveled gear 11, which meshes with a similar gear 12, secured to the shaft 7, and upon its upper end with a beveled gear 13, which is in mesh with a similar gear 14, secured to a shaft 15, journaled in bearings formed in the vertical uprights or standards 16 upon each end of the revolving plate 9.

In order to relieve the vertical shaft 10 of the strain caused by the turn table and its supported parts, a hub or cylindrical enlargement 17 is formed upon the base 1 concentric with shaft 10, which extends through it. Said hub fits into a similar-shaped shaft-box formed in the revolving plate 9, and thereby forms a bearing for the upper plate 9 to prevent the binding of the shaft 10 by the force and strain due to the turning of the table. In the upper ends of the uprights 16 is journaled in suitable bearings a shaft 18, one end of which has secured thereto a gear 19, which meshes with a similar gear 20 upon one end of the shaft 15.

21 denotes an oscillating chute or conveyer casing mounted upon the shaft 18 between the uprights 16. Said chute comprises the rectangular elongated box or chute provided at one end over the shaft 18 with the inlet-opening 21, into which the refuse or unthreshed grain from the return-elevator is discharged in order to be conveyed and fed by said chute to the cylinder of the threshing-machine. The chute or box is provided with a hinged cover 22, and within the same is a slatted carrier or conveyer 23. Said carrier, consisting of the sprocket-chains 24, united by the slats 25, runs over sprocket-wheels 26 upon the shaft 18 within the box and over the sprocket-wheels 27 upon the shaft 28, located in the free or discharge end of the box or chute. In order to permit the slack in the carrier 23 to be taken up, the shaft 28 is journaled in the sliding bearing-boxes 29, which are adjusted by the tension-screws 30.

It will be seen that by revolving the table or upper plate 9 the chute or conveyer may be swung to any desired position. The free or discharge end of the box or chute is suspended by the swing 31 so as to discharge

into the cylinder of the threshing-machine. Said swing 31 runs up over the elevator and can be raised or lowered to adjust the chute at any angle desired. In order to hold the
 5 conveyer in an adjusted position, the revolving plate 9 is provided with a rod 32, bent in semicircular form and lying in a horizontal plane concentric with the axis of the turn-
 10 a bolt 34 upon the cross-bar or brace 3. The bolt 34 extends through the slotted washer 35 and the bar 3 and has the thumb-nut 36 upon its threaded end. By means of said nut the
 15 washer to bind the rod 32 upon the washer, as shown in Fig. 4.

In the operation of the device the chute or casing is moved to the desired position to discharge into the cylinder of the threshing-
 20 machine by revolving the same upon the turn-table and by adjusting the swing 31. By operating the thumb-nut 36 the table and chute will be held in the desired position, as previously explained. The refuse and unthreshed
 25 grain from the return-elevator of the machine will discharge into the inlet end 21 of the chute and be conveyed downwardly by the carrier 23 and be discharged into the threshing-cylinder of the machine. Said carrier
 30 will receive its motion through the shaft 18, gears 19 and 20, shaft 15, beveled gears 14 and 13, vertical shaft 10, beveled gears 11 and 12, shaft 7, and the band-pulley 8, which is belted to the gearing of the machine, as will
 35 be readily understood.

It will be seen that by employing this feeding-conveyer upon the return-elevator the feed of the grain will be positive and there will be little liability of the chute or spout
 40 becoming clogged. Moreover, by having the positive-feed belt 23 the discharge end of the chute may be held stationary and the grain will not be scattered outside the cylinder. By mounting the chute upon the turn-table
 45 the discharge may be directed to any portion of the cylinder or may be turned entirely to one side of the machine to permit the cleaning out the cylinder.

From the foregoing description, taken in
 50 connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in form, proportion, and the minor details of construction may be re- 55
 sorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim, and desire to secure by Letters Pat- 60
 ent, is—

1. An oscillating discharge-chute and means for connecting it to an elevator of a threshing-machine, and a positively-driven carrier or conveyer within said chute, substantially 65
 as described.

2. The combination with a turn-table adapted to be connected to an elevator of a threshing-machine, of a discharge-chute upon said 70
 turn-table, a carrier or conveyer within said chute, and means for driving said carrier, substantially as described.

3. The combination with a base adapted to be supported by an elevator of a threshing-machine, a revolving plate or turn-table mem- 75
 ber mounted upon said base, of an adjustable discharge-chute mounted upon said plate, a carrier or endless conveyer within said chute, and gearing between said carrier and the gear-
 80 ing of the threshing-machine for driving said carrier, substantially as described.

4. A device of the character described comprising, a base, means for supporting the base, a revolving plate or turn-table member 85
 upon said base, a chute mounted upon said plate, a carrier in said chute, means for imparting motion to said carrier and means for holding the plate and chute in an adjusted position, substantially as described.

5. A device of the character described com- 90
 prising, a base formed with an enlargement or bearing, means for supporting said base, a revolving plate or turn-table member formed with a bearing-cavity to engage the enlarge-
 95 ment upon said base means for holding said plate in an adjusted position, an adjustable chute pivoted upon said plate, an endless carrier in said chute and gearing for driving said carrier, substantially as described.

In testimony whereof I have hereunto set 100
 my hand in presence of two subscribing witnesses.

JOSEPH H. HISSONG.

Witnesses:

FANNIE BIDDLEL,
 C. E. SOUTHWICK.