

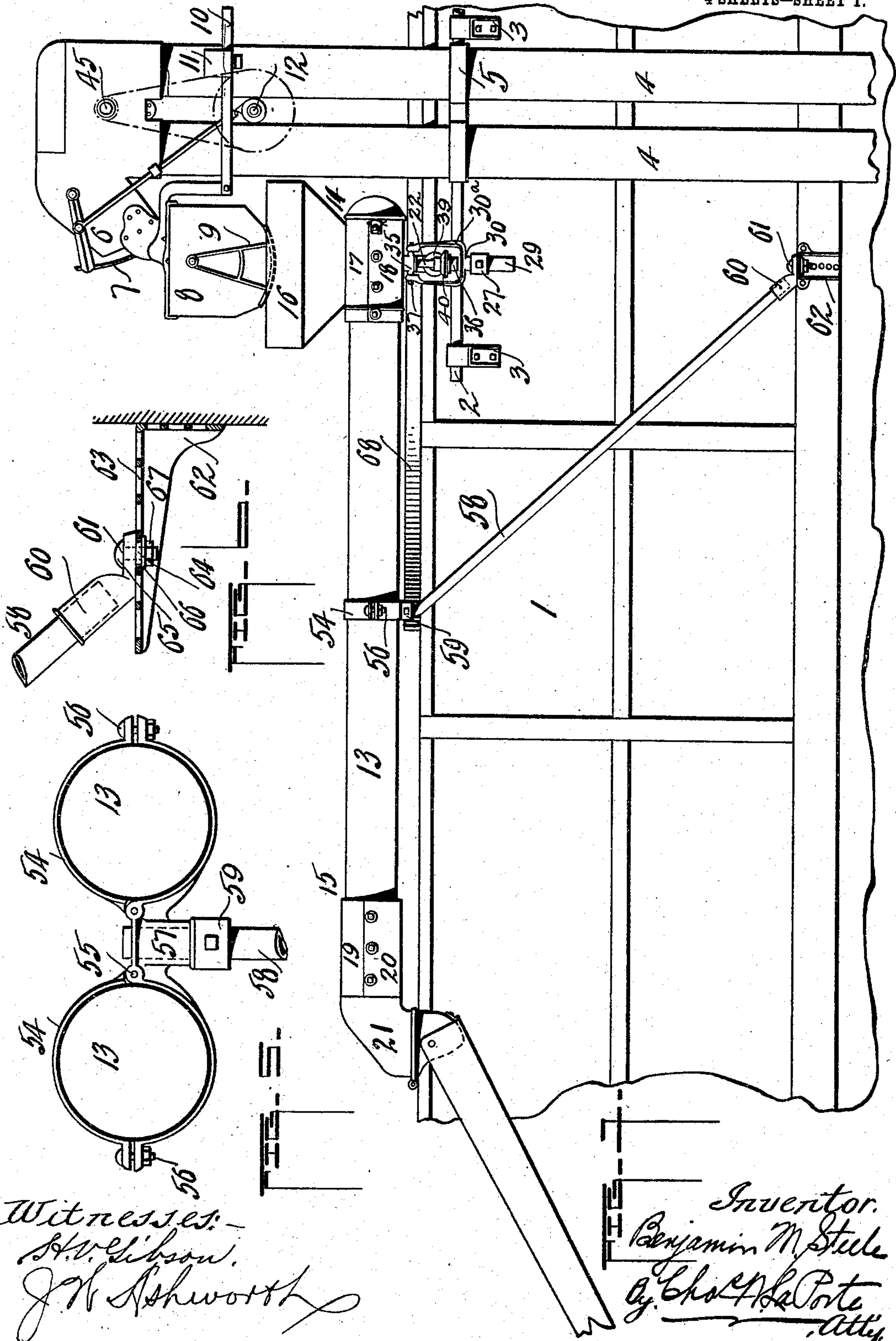
B. M. STEELE.  
CONVEYER.

APPLICATION FILED DEC. 15, 1904.

936,745.

Patented Oct. 12, 1909.

4 SHEETS—SHEET 1.



Witnesses:  
S. W. Gibson.  
J. W. Ashworth

Inventor.  
Benjamin M. Steele  
C. C. Choate & Co.  
Attys.

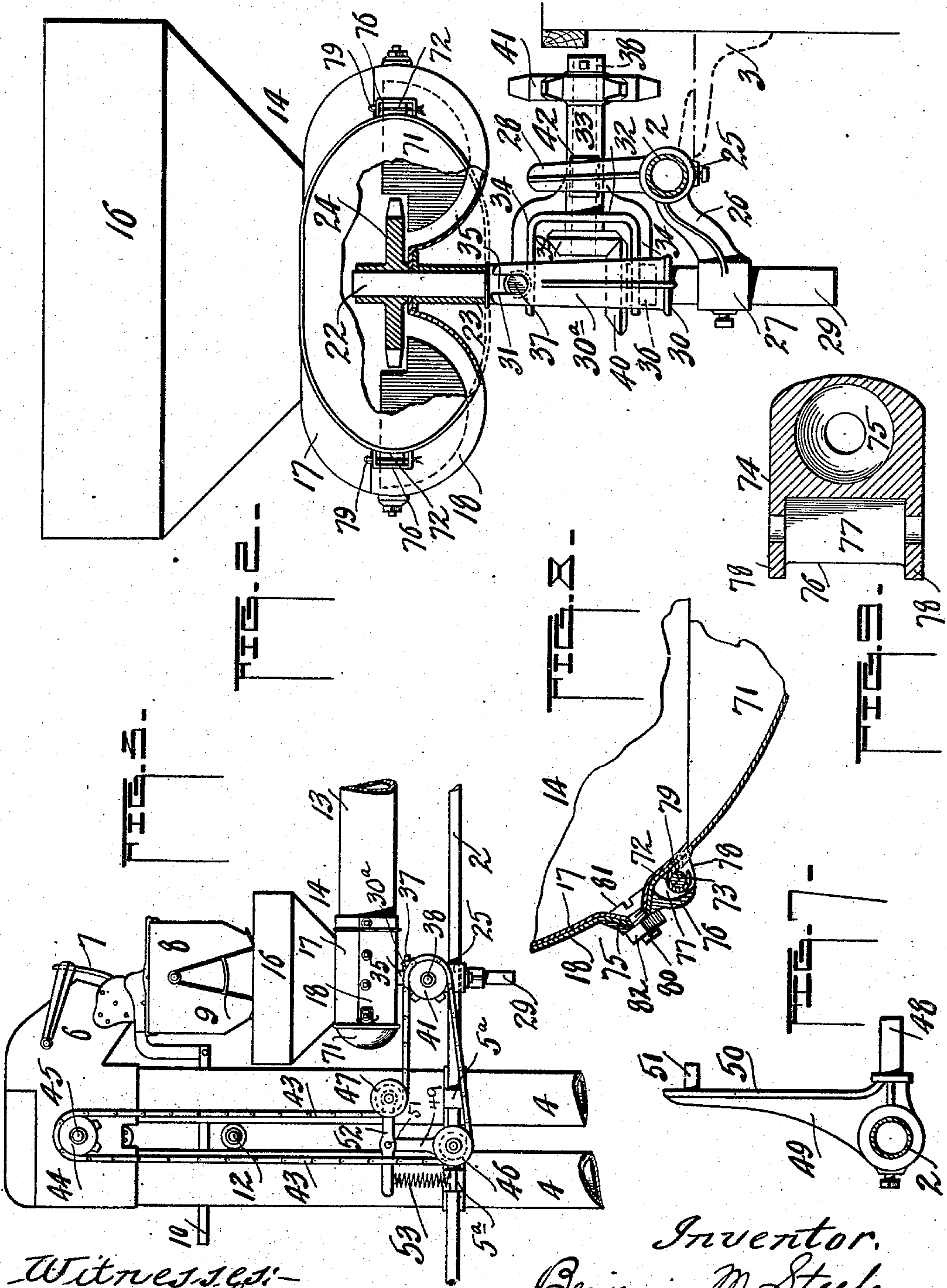
B. M. STEELE.  
CONVEYER.

APPLICATION FILED DEC. 15, 1904.

936,745.

Patented Oct. 12, 1909.

4 SHEETS—SHEET 2.



Witnesses:  
H. V. Gibson,  
J. H. Ashworth

Inventor.  
Benjamin M. Steele,  
By Charles LaPorte,  
att'y.



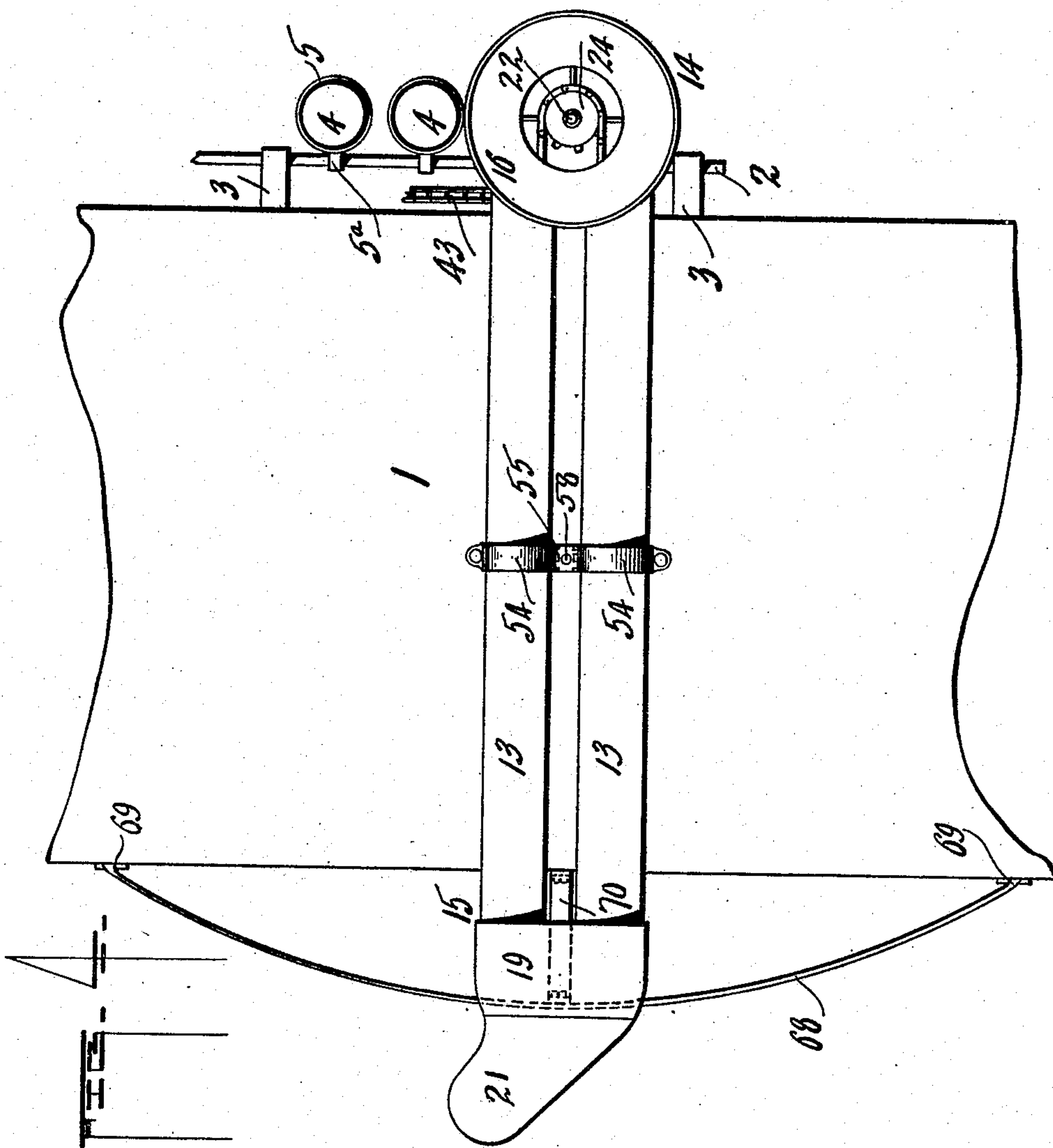
B. M. STEELE.  
CONVEYER.

APPLICATION FILED DEC. 15, 1904.

936,745.

Patented Oct. 12, 1909.

4 SHEETS—SHEET 3.



Witnesses:  
H. W. Gibson  
J. H. Shivers

Inventor:  
Benjamin M. Steele  
By: Charles H. Pote, atty.

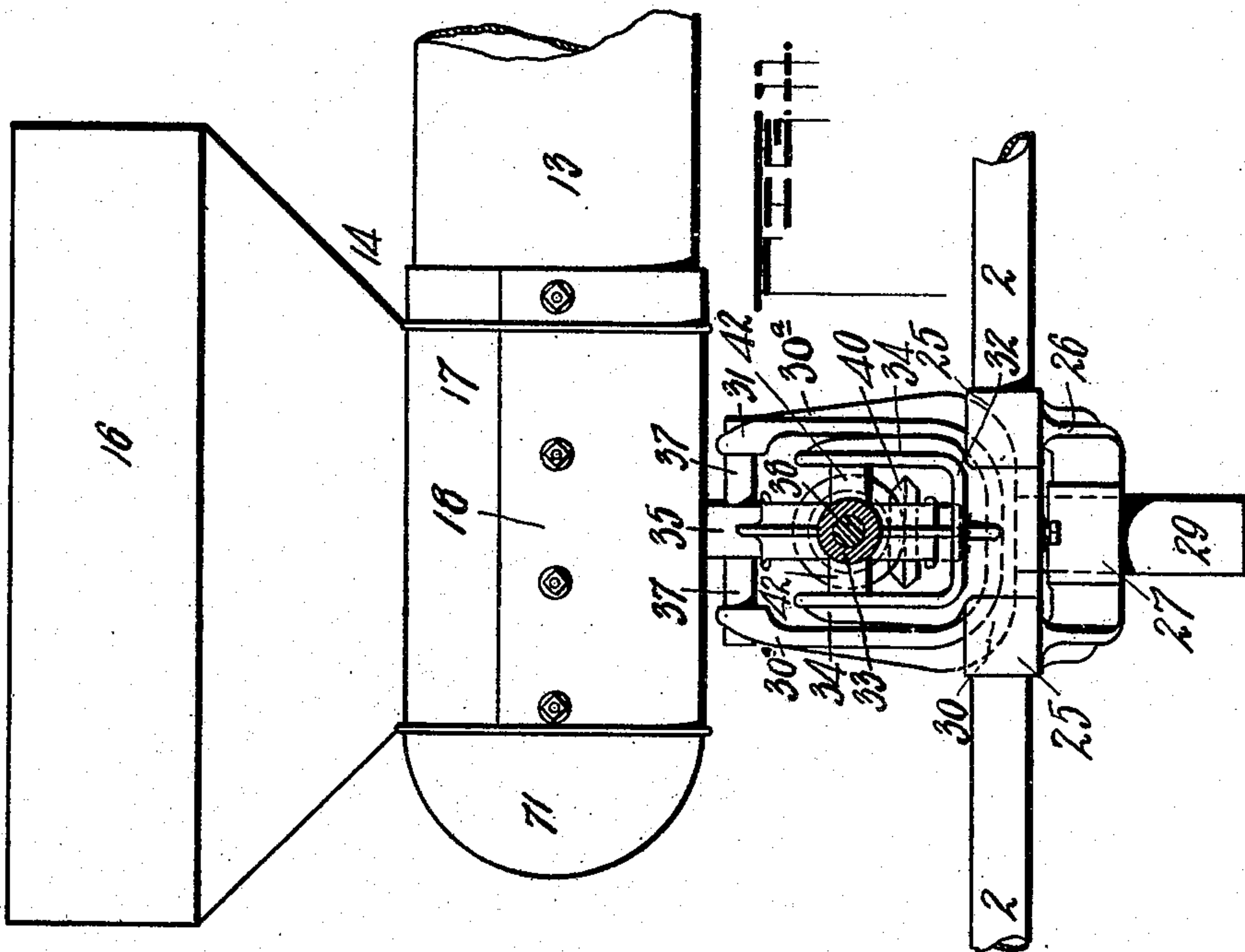
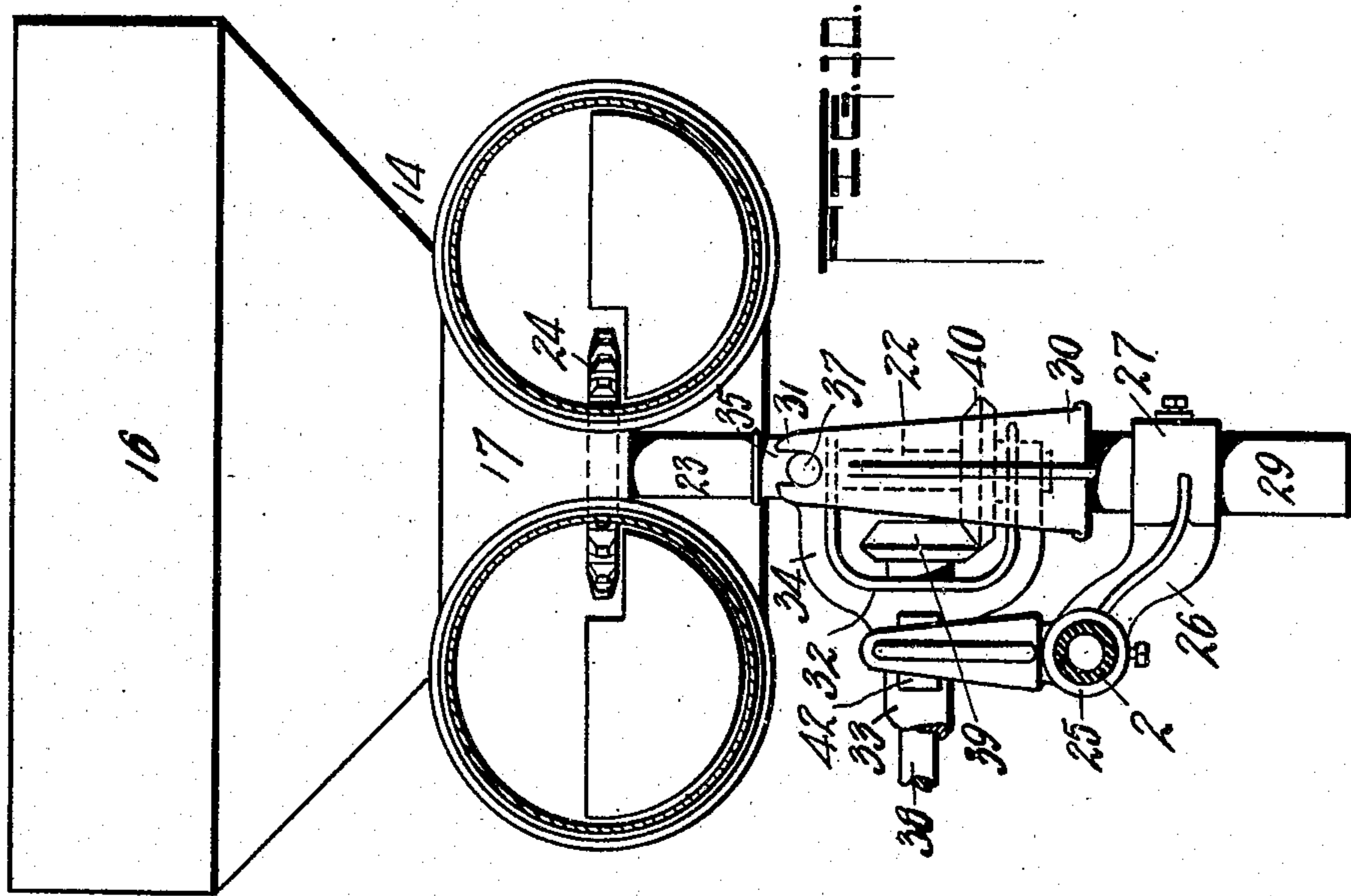
B. M. STEELE.  
CONVEYER.

APPLICATION FILED DEC. 15, 1904.

936,745.

Patented Oct. 12, 1909.

4 SHEETS—SHEET 4.



Witnesses:  
Miss C. Fuller  
Mrs. Charles Bailey

Inventor  
Benjamin M. Steele  
By Charles H. LaPoste  
Att'y.



# UNITED STATES PATENT OFFICE.

BENJAMIN M. STEELE, OF PEORIA, ILLINOIS, ASSIGNOR TO BEN STEELE WEIGHER  
MANUFACTURING COMPANY, OF PEORIA, ILLINOIS, A CORPORATION OF ILLINOIS.

## CONVEYER.

936,745.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed December 15, 1904. Serial No. 237,022.

*To all whom it may concern:*

Be it known that I, BENJAMIN M. STEELE, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Conveyers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has reference to conveyers and relates particularly to that type of conveyer which is swingably supported or attached to a separator, adapted to receive grain elevated to a suitable weighing attachment and from it deposited into the head end of the conveyer and by it delivered to one side or the other of the separator.

One of the objects of the invention is a swinging conveyer, the driving shaft thereof passing down through the elevator casing and journaled in the bifurcated ends of a support; the conveyer swingable on its driving shaft; the support pivotally mounted on a second support which is mounted in a fixed position; a bevel gear on the conveyer driving shaft and a bevel gear meshing with aforesaid gear and carried by a shaft mounted in the first mentioned support by means of which motion is imparted to the conveyer no matter in what position the same is swung.

A further object of the invention is a conveyer pivotally attached to the support of a separator whereby the same may be swung either horizontally or vertically; the gearing for imparting motion to the conveyer comprising a pair of bevel gears and a sprocket by means of which motion is imparted from a suitable source of power to said gears; a support for the body of the conveyer consisting of a rod detachably connected with means secured to the conveyer body and its lower end pivotally attached or connected to a bracket secured to the side of a separator.

The invention has for its further object a conveyer pivotally mounted on a support attached to a separator, the said conveyer so mounted as to be capable of being swung either vertically or horizontally; gearing for actuating the conveyer, the same so mounted as to permit of swinging the conveyer aforesaid, a chain drive for actuating said con-

veyer, the same connected with suitable power and the driving portion of the chain directed of an idler wheel mounted on a fixed support, while the slack of the chain is directed over a swingable idler wheel to adapt itself to the change of position of said conveyer as the same is swung.

A further object of the invention is a conveyer, the end or receiving section of which is provided with a detachable cap, the securing means for the cap comprising plates or washers into which are extended suitable ears from the cap which are looped around a cotter-pin or other suitable means; the said plates or washers also serving as a means together with a bolt and nut for securing the sections of the end section together.

The invention consists in the various features of improvement hereinafter described, illustrated in the accompanying drawings and particularly pointed out by the claims at the end of the specification.

In the drawings: Figure 1 shows in side elevation, somewhat reduced, a portion of a separator, the weighing devices and a conveyer constructed in accordance with my improvements swingably supported or attached to the separator; Fig. 2 is a rear elevation, partly in section, and somewhat enlarged, of the conveyer and the supports upon which the same is pivotally mounted; Fig. 3 is a side elevation of the weighing devices, a portion of the conveyer and the chain drive, being a view of the parts opposite to that seen in Fig. 1, omitting the separator; Fig. 4 is a top plan view of a portion of the separator, also showing in plan my improved conveyer swung across the top of the separator, showing a rail support for the free end of the conveyer in place of the rod, which must be removed when swinging the conveyer into this position; Fig. 5 is a cross-section, enlarged, of the conveyer tubing, and showing in elevation the attachment on the tubes and rod detachably connected therewith for supporting the tubing; Fig. 6 is an enlarged detail in elevation and section of the lower end of the rod for supporting the elevator tubing and the pivotal support for the same on the separator; Fig. 7 is an enlarged detail view of a support for the idlers; Fig. 8 shows in detail and in section an enlarged view of a portion of the end section of the conveyer and the manner of securing



the detachable cap thereto; Fig. 9 is a detail of the washer or plate for joining the parts, also serving to retain the detachable plate on the head section; Fig. 10 is an elevation partly in section of the conveyer, also the supporting and driving devices, the view looking at the opposite side from that shown in Fig. 2; Fig. 11 is a side elevation of the device shown in Fig. 10, looking at Fig. 10 from the left hand side thereof.

The conveyer or portions thereof such as the tubes, the end section, the discharge spout, and the chain and conveying flights in the tubes are in all respects substantially similar to those shown in an application filed by me on Nov. 14th 1903 Serial Number 181,119, and while brief mention will be made herein to such parts it is understood no claim is made thereon; as it will be understood the invention herein may be used equally as well on some other form of conveyer than that shown.

In the drawings a suitable elevator and weighing apparatus is shown, as also so much of a separator as is necessary to illustrate the application of the invention and the mode of attaching the same to the separator and operation of the same from the elevator and weighing apparatus.

1 indicates the body frame of any well known form of separator, to the side of which and at a desirable height thereon is shown a gas-pipe or supporting rod 2 secured in brackets 3.

A suitable elevator constructed of the tubes 4 is stationed in an upright position close to the side of the separator and sustained in such position by means of straps 5 secured to the rod 2 by means of the collars 5<sup>a</sup> integral with the straps, see Fig. 3. At the head of the elevator is provided a head section having a spout 6 adapted to be intermittently closed by the gate 7, and suspended beneath the spout is a weighing hopper 8 provided with a controlling valve 9. The said hopper hung on a scale-beam 10 suitably fulcrumed on the head of the elevator. The elevating devices (not shown) within the tubing are adapted to receive grain from the separator, in a suitable manner, elevate the same and deposit it into the hopper; upon the weight of the hopper overcoming a weight 11 on the scale-beam, suitable devices (not shown) are brought into action for rotating a trip-shaft 12 which, through suitable connections closes the spout 6 by means of the gate 7 and opens the hopper valve 9, depositing whatever grain is in the hopper into a hopper of the conveyer to be described. No special stress is laid upon the detail operation of the weighing devices as they may be any of the well known forms now in use.

The swinging conveyer referred to comprises the sheet metal tubes 13, 13, lying parallel to each other as shown. The tubes at

their opposite ends are secured to the sections 14 and 15. The section 14 forming the receiving end of the conveyer is composed of the hopper 16 and the sections 17 and 18 which are suitably pressed into the form shown with overlapping portions secured in a manner to be described. The sections of the receiving end 14 are provided with tubular portions to which it is designed to connect the ends of the tubes 13. The end section 15 is made of the sections 19 and 20 and pressed into the form shown, being similar to the sections 17 and 18 of the head end, with overlapping portions joined in like manner as the sections 17 and 18, to be described. The sections of the receiving end 14 are provided with tubular portions to which it is designed to connect the ends of the tubes 13. The end section 15 is further provided with the obliquely extended and depending discharge spout 21 forming an exit for material conveyed from the receiving end of the conveyer.

In the tubes 13 is adapted to travel a conveyer made up of a chain and semi-circular flights, the latter partially seen in Fig. 2, but the chain is omitted. This conveying apparatus is adapted to be actuated by a shaft 22 which is journaled at its upper end in a suitable bearing 23 depending from beneath the head section 14 and particularly the part 18 centrally of the hopper 16; the lower depending portion of the shaft 22 is journaled in a suitable support and carries a bevel gear, to be described, while on the extreme upper end of the said shaft and within the head section is carried a sprocket wheel 24, for the purposes apparent. The receiving end of the conveyer is pivotally supported directly beneath the weighing hopper 8, so that when the valve 9 is opened, the contents of the hopper will fall into the hopper 16 of the conveyer head and finds its way to the tubes to be conveyed to the discharge end thereof.

The support for the head end of the conveyer, and the manner of pivoting the same to be swung both horizontally and vertically will now be described: On the gas-pipe or rod 2 is fixedly secured a bracket 25 which has the forwardly extended and downwardly projecting portion 26 formed with the tubular bearing portion 27, and extending upwardly from the portion of the bracket secured to the rod 2 are a pair of fingers 28 serving as guides for parts to be described. Adjustably carried and secured in the tubular bearing 27 of the bracket 25 is an elongated stem 29 forming part of a support 30 having the integral and upwardly extended bifurcated fingers or extensions 30<sup>a</sup> with the notched or cut-out upper ends 31.

32 denotes a second support which is normally disposed at right angles to the support 30 and is formed with the tubular or sleeve extension 33 and the forwardly projecting



bifurcated extensions or fingers 34, which overlie each other and formed with the tubular bearings 35 and 36 at their forward ends. The bearing 35 is formed with the oppositely extending or radially disposed studs or stems 37 which are adapted to be seated in the notched or cut-out portions 31 of the stems 30<sup>a</sup> which form bearings for the said studs and a support for the support 32. Through the tubular or sleeve extension 33 of support 32 is carried a shaft 38, on the forward end of which is carried a bevel gear 39 which meshes with a bevel gear 40 carried by the extension of the shaft 22 which extends down through and is journaled in the bearings 35 and 36 of the arms 34 of the support 32. On the opposite end of the shaft 38, is carried a sprocket wheel 41 driven in a manner to be described. Arranging the support 32 as I do, with the sleeve extension thereof between the fingers 28, the bosses 42 on the said sleeve engage the inner faces of said fingers and serves to guide the sleeve when swung up or down.

From the above description it will be readily understood how the conveyer may have both a vertical and horizontal swinging motion imparted to it. In swinging horizontally, the conveyer body is swung on its pivot, the shaft 22; the bearing as well as the support of which is the arms 34 of the support 32. In swinging the outer end of the conveyer in a vertical plane, for the purpose of getting the end thereof over the separator to swing the same across the said separator, the pivot therefor is the studs 37 seated in the recesses 31, the sleeve extension 33 moving up or down between the fingers 28. It is further seen that, no matter whether the elevator is being swung vertically or horizontally the gears 39 and 40 will roll around each other, always remaining in mesh to facilitate in imparting motion to the shaft 22 from the shaft 38.

The mode of driving the shaft 38, is as follows: 43 denotes a drive chain which is adapted to receive its motion from a sprocket wheel 44 carried on a shaft 45 which passes through the head section of the elevator and actuated from suitable source of power (not shown). The driving portion of the chain extends down from the sprocket 44 to and around a fixed idler wheel 46 and thence to and around the sprocket wheel 41, and from the said sprocket the chain extends to and around the adjustably mounted idler wheel 47, and to the wheel 44. The idler wheel 46 described as being fixed, is mounted on a stud 48, see Fig. 7, of a bracket 49 fixedly mounted on the rod 2, the said bracket having an extension 50 with a stud 51 on which is fulcrumed an arm 52 which carries on one end the idler wheel 47, the opposite end of the arm 52 being held under the yielding tension of a spring 53 bearing between the

free end of the arm 52 and a boss on one of the collars 5<sup>a</sup> of the strap 5.

The mechanism for sustaining the outer portion of the conveyer in a horizontal position, as seen in Fig. 1, consists of the bands or straps 54 which are pivotally connected to each other at 55, see Fig. 5, with semi-circular portions adapted to be clamped around the body of the tubes 13, approximately at a point seen in Fig. 1, and secured together by means of the bolts 56. The intermediate portion of the said bands or straps are provided with the depending tubular portion 57, and into this tubular portion extends the upper end of a rod 58 which has secured thereto a collar 59 for retaining the portion 57 of the bands in its adjusted position on the rod and prevents the same from sliding down on the said rod. The rod 58 extends downwardly and has its lower end seated in a tubular bracket 60 which is pivotally mounted at 61 to a support or bracket 62 attached to and extending out from the side of the separator. The said bracket is provided with right angle portions of suitable length each having a series of perforations or openings 63, and the bracket 60 is provided with a stud extension 64 adapted to be seated in any one of the perforations whereby the lower end of the rod 58 may have an adjustable as well as a swingable connection with the bracket 62, a bolt 65, a washer 66 and a nut 67 serving to secure the bracket 60 to the bracket 62, the bolt 65 serving as the pivot on which the rod 58 is swung to accommodate the same to the movement of the conveyer as it is swung on its pivot 22. The adjustable connection of the bracket 60 to the bracket 62 is provided for attaching the within devices to separators of different builds, where the rods 2, for various reasons are closer to or farther from the body of the machine, placing the pivot 22 of the conveyer in corresponding position, thus bringing the pivot 61 of the rod 58 always beneath the pivot 22 of the conveyer.

In Fig. 1 the conveyer is swung in a position longitudinal with the separator body, being more convenient to illustrate the same this way, yet it is to be understood the angle at which the conveyer may be swung has hardly any limit. However to swing the same across the body of the separator to deliver on the opposite side thereof, it is first necessary to detach the upper end of the rod 58, by removing the end thereof from the tubular portion 57 of the bands 54, when the elevator may be raised on the pivot 37 and swung around into the position seen in Fig. 4. Having to dispose of the rod 58 for supporting the end of the conveyer, it is necessary to provide a supplemental support for permitting the conveyer tubing to move above the top of the separator and



any projections that may be attached thereto. This supplemental support consists of the track or bar 68 which may be only a part of arc of a circle, as illustrated, having its body secured to the separator as shown at 69 and 70, the latter a brace extending from the outer portion of the track down to the side of the said separator. I do not wish to be confined to the location of the track as here shown, nor to the manner of securing the same. Further, it may be found convenient to extend a track of this kind to form a circular support, disposing of the rod 58, the same struck on a radius extending from the pivot 22 of the said conveyer, all of which it is believed will be understood.

Attention is here directed to the end of the head section 14, which is provided with a detachable or swingable cap 71, shaped somewhat as shown in the figures, adapted to close over an end opening through which the conveyer chain (not shown) and flights may be taken out or replaced, and by means of which access may be had to the interior of the head section whenever it may be found necessary; the opposite end portions of the cap being provided with ears 72 having the curved, looped or hooked ends 73. The locking means for securing the cap, also serves to join the matching or overlapping portions of the sections 17 and 18 of said head or receiving section 14. The locking means consists of a washer or plate 74 having a counter-sunk face 75 and the extended plate portion 76 with a depressed or cut-out portion 77 and the side flange portions 78 which have coinciding openings through which it is adapted to extend a cotter-pin or equivalent securing device 79. In joining the sections 17 and 18 and placing the washer 74 whereby the hooked ends 73 may be engaged by the cotter-pins, the washer is placed on the sections somewhat as seen in Figs. 1 and 8 and a bolt 80 having a tapered head 81 is passed through coinciding openings of the sections 17 and 18 and the washer, from the inside of the said sections and a nut 82 which is secured onto the outer end of the bolt draws the head of the bolt and metal surrounding the same into the counter-sunk portions of the washer, to leave a smooth inner face of the said sections, and securing the washer in position on the said sections. Having thus secured the washer, the plate 71 is put in position with the lips 72 extending into the cut-out portions 77 of the washers, when the cotter-pins are slipped into position engaging the hooked ends 73 somewhat as seen in Fig. 8 and locking the plate against the end section. Loosening one of the cotter-pins, the plate may be swung back, on the opposite pin which will serve as a pivot therefor, or removing both the pins the plate may be detached. In

joining other portions of the sections 17 and 18 together, also the tubes to the sections, the washers will be substantially the same as those above referred to, with the exception of the plate extension 76.

I am aware that it is not broadly new to swingably attach a conveyer to a separator, but I am not aware that a conveyer of this type has ever been pivotally mounted on the driving shaft carrying a gear meshing with and rotating upon a gear from which it receives its power; and while I am aware that several attempts have been made to support the outer end of a swinging conveyer, yet I am not aware of an attachment of the character herein.

It will become obvious from the foregoing that various changes may be made in the detail construction and application of the conveyer and I do not wish to be confined to the exact details thereof.

What I claim is:—

1. In combination with a separator, a conveyer, a driving shaft extending into the head end of the conveyer, and at its upper end carrying a driving sprocket, a bevel gear on the lower end of the said shaft, gearing adapted to mesh with aforesaid gear, a support for the driving shaft and conveyer whereby the conveyer may be swung horizontally on the shaft as a pivot and the connection between said shaft and support adapting the conveyer to be swung vertically.

2. In combination with a separator, a conveyer, a driving shaft extending into the head end of the conveyer, a sprocket wheel on the end of the shaft within the head, a bevel gear on the lower end of said shaft, a support in which the said shaft is pivotally mounted, adapting the conveyer to have horizontal and vertical swinging movement, a shaft journaled in the said support, a bevel gear on one end of said last mentioned shaft adapted to continuously intermesh with the first mentioned bevel gear, and means for actuating the shaft of the support aforesaid.

3. In combination with a separator, a conveyer, a driving shaft extending into the head end of the conveyer and serving as the pivot on which the conveyer is adapted to be swung horizontally, a support in which the said shaft is journaled, a second support upon which the first support is pivoted to adapt the conveyer to be swung vertically, and means for actuating the shaft aforesaid.

4. In combination with a separator, a conveyer, a drive shaft extending into the head end of the conveyer and serving as the pivot on which the conveyer is adapted to be swung horizontally, a gear on the lower end of said drive shaft, a support in which the said shaft is journaled, a second support upon which the first support is pivoted to



adapt the conveyer to be swung vertically, a shaft journaled in the second support carrying a bevel gear meshing with the bevel gear aforesaid and also carrying a sprocket wheel on its outer end, and a drive chain for actuating the sprocket wheel, for the purposes specified.

5. In combination with a separator, a conveyer, a support for the forward end of the conveyer, comprising a rod detachably connected with the body of the conveyer, and a bracket for the lower end of said rod, said last mentioned bracket adjustably and pivotally connected with the said separator.

6. In combination with a separator, a conveyer swingably attached at its head end thereto, a support for the forward end of the conveyer comprising a band secured to the body of the conveyer, a rod detachably connected with the said band, the said rod at its lower end seated in a bracket pivotally attached to a support of the separator, the pivot of the bracket aforesaid being disposed in a vertical line passing through the pivot of the conveyer.

7. In a conveyer, the combination of an end section provided with an open end, a cap for closing the opening into the end section, and means for securing the said cap, comprising a washer having cut-out portion, lips on the cap extending into the cut-out portion of the washers, and cotter-pins passing through the said washers and engaging the said lips, substantially as specified.

8. In a conveyer, the combination of an end section made of two sections having overlapping portions and having an open rear end, a cap for closing the end, means for securing the cap and also joining the sections aforesaid, comprising a counter-sunk washer having a plate extension formed with a cut-out portion, a bolt having a tapered head adapted to be passed through the sections and counter-sunk portion of the washer, a nut for drawing the head of the bolt and sections surrounding the same into the counter-sunk portions of the washer, lips from the cap having looped ends extending into the cut-out portions of the extensions of said washer, and pins adapted to be passed through the plate extension for engaging the looped ends of the lips, substantially as specified.

9. In combination with a separator, a conveyer swingably attached thereto, the same comprising parallel tubes joined in head and end sections, a drive shaft extending into the head end of said conveyer, means for actuating said shaft, and a support for said shaft and conveyer, the same adapting the conveyer to be swung both horizontally and vertically.

10. In combination with a separator, a conveyer swingably attached thereto, the

same comprising parallel tubes spaced apart and joined in head and end sections, a drive shaft extending into the head end of said conveyer, means for actuating said shaft, a support for the said shaft and head end of said conveyer, the same adapting the conveyer to be swung both horizontally and vertically and a swingable support for the forward portion of said conveyer.

11. In combination with a separator, a conveyer swingably attached thereto, the same comprising parallel tubes spaced apart and joined in head and end sections, a drive shaft extending into the head end of said conveyer, means for actuating said shaft, a support for the said shaft and head end of said conveyer, the same adapting the conveyer to be swung both horizontally and vertically, and a support for the forward end of the said conveyer, consisting of a rod pivotally supported for horizontal movement at its lower end to the body of the separator and its upper end detachably connected to the said tubes.

12. In combination with a separator, a conveyer swingably attached thereto, the same comprising parallel tubes spaced apart and joined in head and end sections, a drive shaft extending into the head end of said conveyer, also serving as the pivot upon which the conveyer is swung, means for supporting and actuating said shaft, and a support for the forward end of the said conveyer, consisting of a track attached to the body of the separator upon which the conveyer rides, the said track struck on a radius whose center is the center of the shaft aforesaid.

13. In combination with a separator, a conveyer swingably attached thereto, a rod forming a fixed support, a bracket extending from the said rod, a support adjustably secured to said bracket, a second support having a pivotal connection with the said adjustable support and provided with bearings, a driving shaft extending into the end of the conveyer and journaled in the bearings of the second mentioned support, and means for actuating the said shaft.

14. In combination with a separator, a conveyer swingably attached thereto, a rod forming a fixed support, a bracket attached to said rod and provided with extended parallel guiding fingers, a support adjustably secured to said bracket, a second support having a pivotal connection with the said adjustable support, the same provided with suitable bearings and the rear end of the said support movable up or down between the guiding fingers aforesaid, a driving shaft extending into the end of the conveyer and journaled in the bearings of the second mentioned support, and means for actuating the said shaft.



15. In combination with a separator, a conveyer swingably attached thereto a fixed rigid support from the separator, a bracket attached to said support and provided with  
5 extended parallel guiding fingers, a support adjustably secured to said bracket and provided with parallel sustaining arms slotted at their outer terminals, a driving shaft extending into the head end of the conveyer,  
10 also serving as the pivot upon which the conveyer is swung, a support for the said shaft, the same having oppositely extended studs adapted to be seated in the slots of the sustaining arms of support aforesaid,  
15 and provided with an extension movable up or down between the guiding fingers of the said bracket, and mechanism for actuating the said shaft.

16. In combination with a separator, a  
20 conveyer swingably attached thereto, a fixed rigid support from the separator, a bracket attached to said support and provided with extended parallel guiding fingers, a support adjustably secured to said bracket and pro-  
25 vided with parallel sustaining arms slotted at their outer terminals, a driving shaft extending into the head end of the conveyer, also serving as the pivot upon which the conveyer is swung, a support for the said  
30 shaft, the same having oppositely extended studs adapted to be seated in the slots of the sustaining arms of support aforesaid, and provided with a tubular extension movable up or down between the guiding fingers of  
35 said bracket, a sprocket wheel on the upper end of said shaft within the head of the conveyer, a bevel pinion on the lower end of the said shaft, a shaft carried within the tubular extension of the support for the driving  
40 shaft, a bevel pinion on said shaft continu-

ously in mesh with the pinion of the driving shaft, and means for actuating the shaft in the tubular extension aforesaid.

17. In combination with a separator, a conveyer swingably attached thereto, the  
45 same comprising a head and an end section and parallel tubes spaced apart and joined in the said head and end sections, a drive shaft extending into the head of said conveyer, also serving as the pivot upon which  
50 the conveyer is swung, a detachable cap for the end of the head section, and means for securing the same, comprising members secured to the head section, lips from the said  
55 cap having engagement with the said members, and pins for holding the lips in engagement with the said members.

18. In combination with a separator, an elevator sustained in an upright position by  
60 said separator, a driving shaft in the head end of the elevator, means for actuating said shaft, a conveyer swingably attached to the separator, a driving shaft extending into the head end of the conveyer, also serving as the  
65 pivot upon which the conveyer is swung, a drive chain for imparting power from the shaft at the head of the elevator to the driving shaft of the conveyer, an idler wheel attached to a fixed support around which the driving portion of the chain is directed, and  
70 a second idler wheel attached to an adjustable support around which the slack of the said chain is directed.

In testimony whereof I affix my signature, in presence of two witnesses.

BENJAMIN M. STEELE.

Witnesses:

J. W. ASHWORTH,  
ROBT. N. McCORMICK.