P. J. FANT.

PEANUT DIGGER.

APPLICATION FILED MAR. 25, 1918.

1,288,541.

Patented Dec. 24, 1918.

3 SHEETS—SHEET 1.

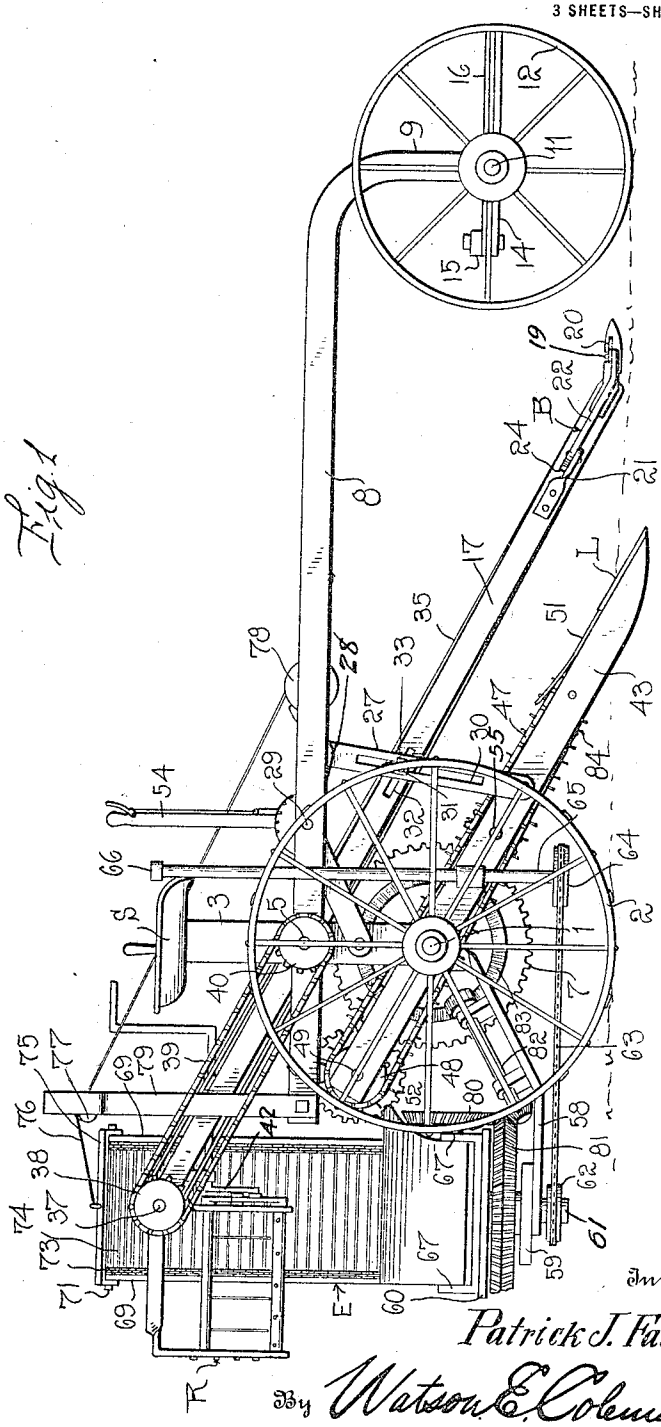


Fig. 1.

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3 SHEETS—SHEET 2.

Fig. 2

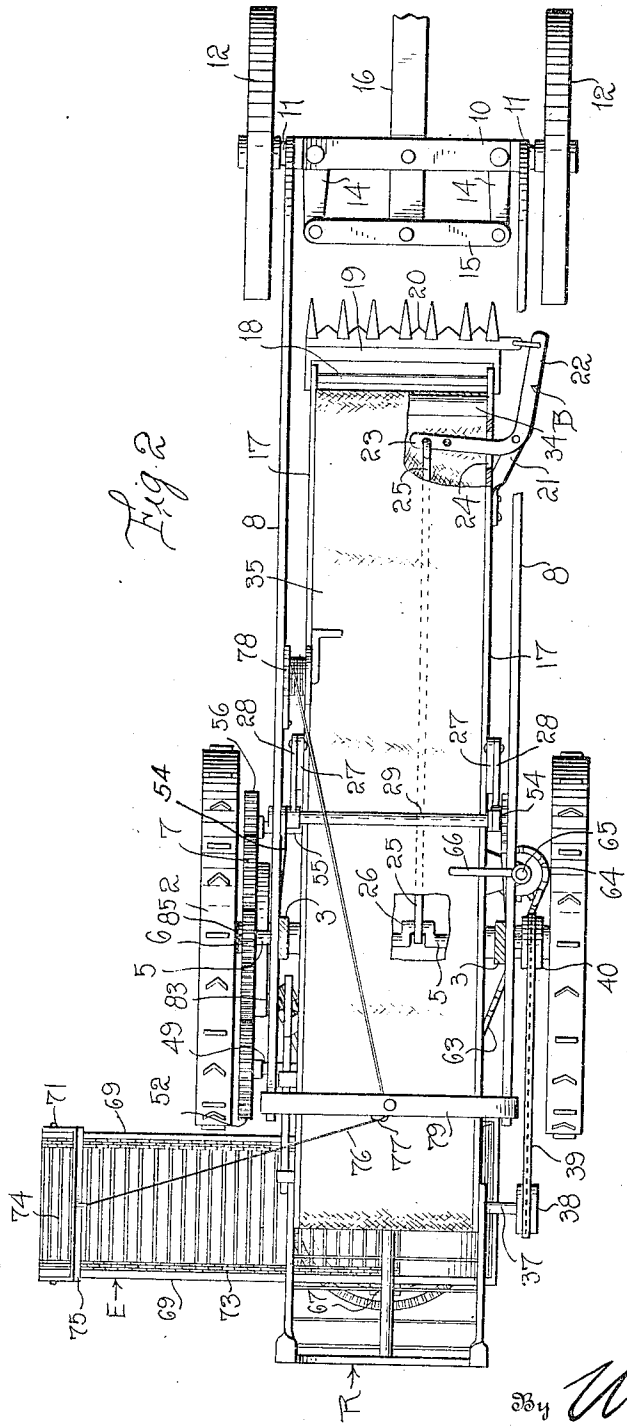


Fig. 5.

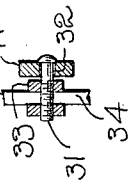
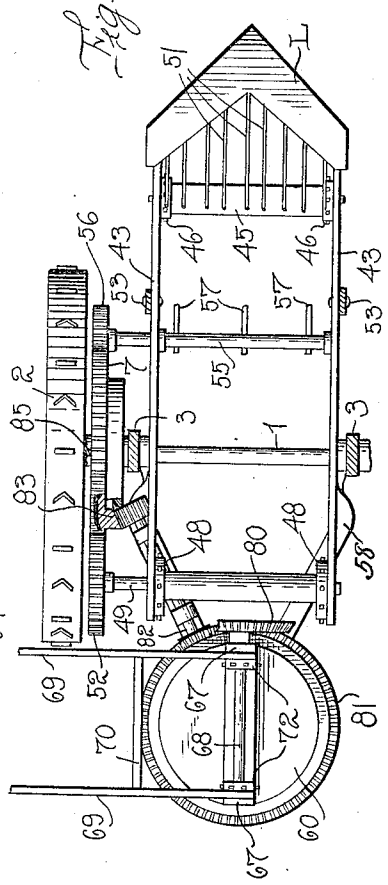


Fig. 3



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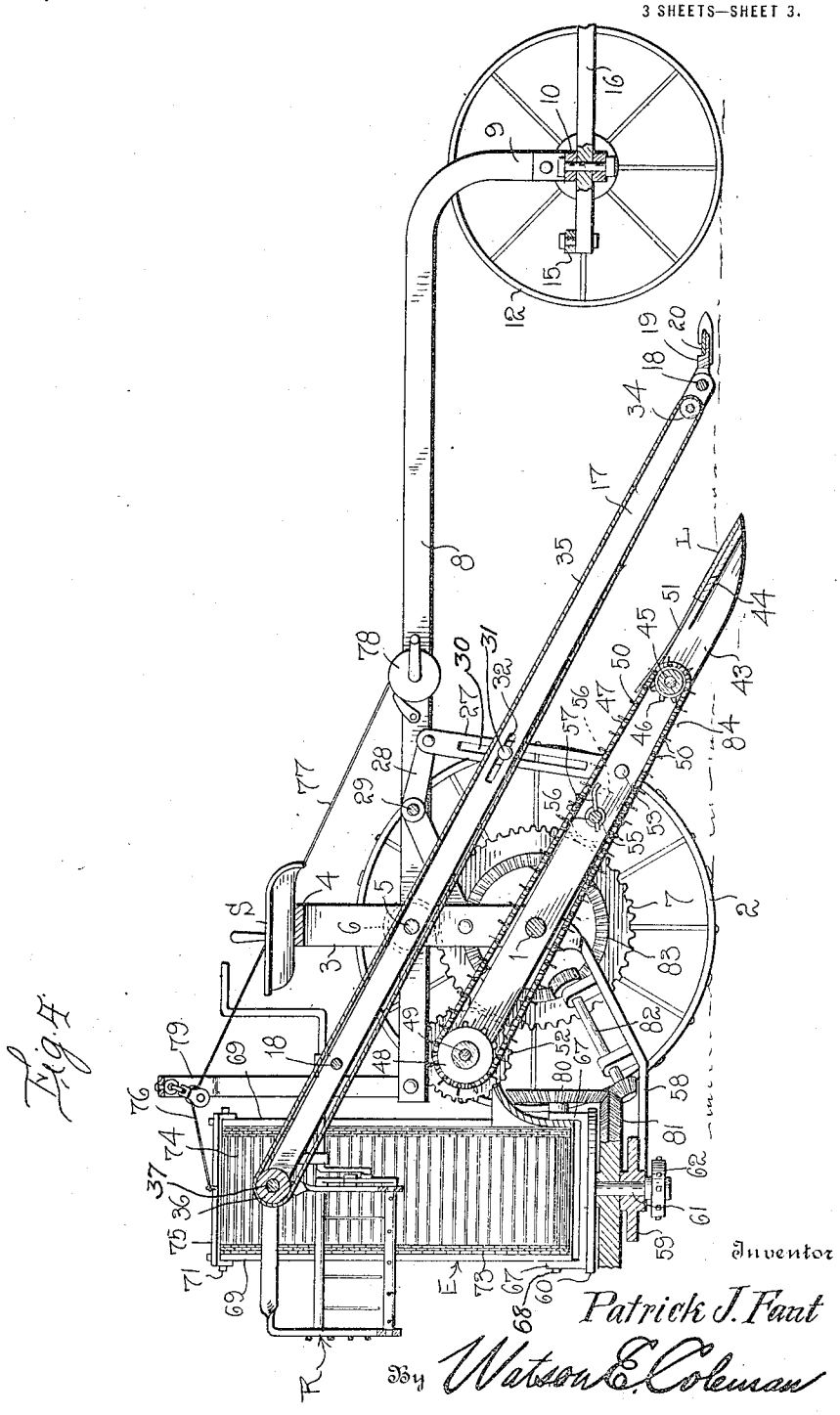


Fig. 4.

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# UNITED STATES PATENT OFFICE.

PATRICK J. FANT, OF HUGO, OKLAHOMA.

## PEANUT-DIGGER.

1,288,541. Specification of Letters Patent. Patented Dec. 24, 1918.

Application filed March 25, 1918. Serial No. 224,594.

*To all whom it may concern:*

Be it known that I, PATRICK J. FANT, a citizen of the United States, residing at Hugo, in the county of Choctaw and State of Oklahoma, have invented certain new and useful Improvements in Peanut-Diggers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in peanut diggers and it is an object of the invention to provide a novel and improved device of this general character including a laterally adjustable elevator adapted to discharge within a farm wagon or barge trailing the harvester and wherein a conveyer leading from the lifting element delivers to said elevator.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved peanut digger whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in side elevation of a peanut digger constructed in accordance with an embodiment of my invention;

Fig. 2 is a view in top plan with portions broken away of my improved digger as herein embodied;

Fig. 3 is a fragmentary view in plan with certain of the parts omitted, illustrating the means for driving the elevator as herein included;

Fig. 4 is a longitudinal vertical sectional view taken through the device as herein set forth;

Fig. 5 is an enlarged fragmentary view partly in elevation and partly in section illustrating a connection between one of the side members of the upper conveyer and the coacting link.

As disclosed in the accompanying drawings, 1 denotes a supporting axle and mounted upon the opposite extremities thereof are the traction wheels 2 and the axle 1 is adapted to rotate upon the forward advance of the machine. Suitably engaged with the opposite end portions of the axle 1 but inwardly of the wheels 2 are the standing posts or standards 3 tied or connected at their upper end portions by the transversely disposed member 4 and suitably mounted upon the member 4 is the seat structure S.

Rotatably supported by the posts or standards 3 at a predetermined point above the axle 1 is a transversely disposed shaft 5 provided at one end with a gear 6 in mesh with a gear 7 mounted on the axle 1. The shaft 5 also affords a mounting for the end portions of the substantially horizontally disposed and transversely spaced beams 8 having their forward extremities continued by the downwardly directed extensions 9 engaged with an axle 10. Pivotally engaged about vertical axes are the spindles 11 upon which are mounted the steering wheels 12. Extending rearwardly from the spindles 11 are the arms 14 with which is operatively engaged the steering rod 15. Pivotally engaged with the rod 15 and the axle 10 is a draft pole or tongue 16. Mounted for vertical swinging movement at a predetermined point intermediate their length are the transversely spaced side members or beams 17 which are tied or connected adjacent their opposite ends by the spacing rods 18. Suitably engaged with the lower end portions of the side members or beams 17 is the transversely disposed cutter bar 19 with which coacts the reciprocating sickle 20. Extending outwardly from the lower end portion of one of the side members or beams 17 is a bracket 21 with which is pivotally engaged the heel portion of a bell crank lever B. One of the arms 22 of the lever B is forwardly directed and is operatively engaged with the end portion of the sickle so that upon rotation the second arm 23 of the lever B extends inwardly and transversely through a suitable opening 24 produced in the lower portion of the adjacent or coacting member or beam 17. Pivotally engaged with the inner end portion of the arm 23 is a pitman 25 having its opposite end portion engaged with the crank 26 interposed in the shaft 5. By this arrangement it will be perceived that upon rotation of the shaft 5 the desired reciprocation of the sickle 20 is obtained. The cutter bar 19 and the

coacting sickle 20 serve as a topping mechanism whereby the vines are severed before the peanuts are lifted by the element L to be hereinafter more particularly referred to.

The cutting bar 19 is positioned in the desired relation to the surface of the ground over which the machine is traveling through the medium of the rigid links 27 pivotally engaged with and depending from the forwardly directed rock arms 28 carried by the transversely disposed rock shaft 29 rotatably supported by the beams 8. The rigid links 27 overlie the side members or beams 17 and are provided with the longitudinally disposed slots 30 through which are directed the outstanding threaded shanks 31 disposed through the slots 32 produced in the side members or beams 17. Coacting with the threaded shanks 31 are the clamping nuts 33 or the like, holding the same to the links 27.

Immediately adjacent the cutter bar 19 the side members or beams 17 rotatably support the transversely disposed roller 34. Directed around the roller 34 is an endless conveyer belt 35 preferably of canvas and which belt 35 is also disposed around a transversely disposed roller 36 rotatably supported by the upper or rear end portions of the members or beams 17. The second or upper roller 36 is provided with an extended shaft 37 to which is suitably secured a sprocket 38. Engaged with the sprocket 38 is a chain 39 also directed around a sprocket 40 fixed to an end portion of the shaft 5 whereby it will be perceived that upon forward travel of my improved machine, the upper stretch of the belt 35 will travel upwardly and rearwardly. The vines severed by the topping mechanism carried by the forward end portions of the members or beams 17 are received by the upper stretch of the belt 35 and are discharged within a receptacle or basket R supported by the rear portions of the members or beams 17.

Engaged with the axle 1 in predetermined spaced relation are the side members or beams 43 mounted for swinging movement in a vertical plane and the forward end portions of said side members or beams 43 terminate inwardly of the forward end portions of the side members or beams 17 as is also true of the upper or rear ends of said members or beams 43 relative to the members or beams 17. The lower portions of the members or beams 43 are connected by the transversely disposed member 44 to which is suitably connected the plow or lifting member L hereinbefore referred to and which is adapted to penetrate the ground sufficiently to pass under the peanuts and bring the same to the surface. Rotatably supported by the members or beams 43 rearwardly of but in close proximity to the lifting member or plow L is a transversely disposed roller 45 provided at its opposite end portions with the sprockets 46. Passing around the sprockets 46 are the endless chains 47 which are also directed around the sprockets 48 carried by the opposite end portions with the transversely disposed shaft 49 rotatably held by the upper or rear end portions of the side members or beams 43. The transversely alined links of the chains 47 are connected by the rods 50 whereby a conveyer is afforded and upon the upper stretch of which the lifted peanuts are received and carried rearwardly. Secured to the rear marginal portion of the member 44 are the rearwardly directed tines 51 having their free or inner end portions overlying the roller 45 and beneath which the rods 50 pass. The peanuts as lifted from the ground are forced over the tines 51 upon the upper stretch of the carrier coacting therewith. The separate relation of the tines 51 and the rods 50 permits the dirt delivered with the peanuts to readily drop therebetween so that when the peanuts reach the discharging end of the conveyer they are substantially free of all foreign matter.

The shaft 49 has fixed to an end portion thereof a gear 52 in mesh with the gear 7 hereinbefore referred to whereby the desired movement to the upper stretches of the chains 47 is obtained.

The side members or beams 43 at a point in advance of the axle 1 are pivotally engaged as at 53 with the lower end portions of the rigid links 27 hereinbefore referred to so that upon upward swinging movement of the arms 28 the lifting element L may be vertically adjusted relative to the ground. It will be self-evident that upon upward movement of the arms 28 the members or beams 17 will be lifted in unison with the members or beams 43. It will also be self-evident that the members or beams 17 and the members or beams 43 may also be relatively adjusted in accordance with the occasions of practice and which adjustment is further facilitated by the slots 32 hereinbefore referred to and which are disposed longitudinally of the members or beams 17.

Coacting with the shaft 29 is a hand lever 54 of any ordinary or preferred construction and which is employed to impart the desired movement to the shaft 29. It is also to be observed that the hand lever 54 is in such proximity to the seat structure as to permit the same to be operated by the occupant of said seat structure.

Rotatably supported by the members or beams 43 at a predetermined point rearwardly of the roller 45 is a transversely disposed shaft 55 which extends between the stretches of the chains 47 and which has one end portion provided with a gear 56 in mesh with the gear 7 hereinbefore referred to whereby said shaft 54 is rotated upon the advance of the machine. Radiating from

the shaft 54 are the fingers 57 which serve to agitate the peanuts as they are carried upwardly and rearwardly and whereby an additional means is provided to assure the separation of the dirt therefrom.

Extending rearwardly from the lower end portions of the posts or uprights 3 are the converging arms 58 which have secured to the outer portions the head 59. Resting upon the head 59 is a rotatable table 60 provided with a depending trunnion 61 extending through the head 59. The lower end portion of the trunnion 61 is provided with a sprocket 62 around which is directed a chain 63 also disposed around a sprocket 64 fixed to the lower end of the vertically disposed shaft 65 rotatably supported by one of the beams 8 and a beam or side member 43 therebeneath. The upper end of the shaft 65 is provided with a crank 66 or other means whereby said shaft 65 may be rotated.

The table 60 is provided with a pair of upstanding brackets 67 which rotatably support a shaft 68 and the shaft 68 also serves as a pivotal mounting for the parallel side members 69 of predetermined length and which is embodied in the elevator structure indicated in its entirety as E. The members 69 are maintained in spaced relation by the spacing members 70 arranged at various points longitudinally thereof and rotatably supported by the outer or upper end portions of the members 69 is the shaft 71. Fixed to the shafts 68 and 71 adjacent the opposite ends thereof are the sprocket wheels 72 around which pass the endless chains 73. The transversely alined links of the chains 73 are connected by the rods 74.

Loosely engaged with the upper shaft 71 is a yoke 75 which has connected therewith a flexible member 76 passing over a pulley 77 and engaged with a winding drum 78 carried by one of the beams 8 and which is adapted to be rotated in any desired manner. The pulley 77 depends from the transverse center of the member 79 substantially in the form of an inverted U and which has its free extremities suitably anchored to the rear portions of the members 8. The flexible member 76 affords a support for the outer end portion of the elevator structure E and also affords a means whereby the members 69 may be supported at various angles of inclination. It will also be self-evident that the elevator E may be caused to discharge on either side of the machine by properly rotating the table 60.

The lower shaft 68 has affixed to one end thereof, a gear 80 which is in mesh with a second gear 81 loosely mounted on the depending trunnion 61 and which gear is rotated in any desired manner by a movable part of the machine upon the forward advance thereof. The elevator E affords means whereby the peanuts delivered thereto by the conveyer coacting with the lifting element L may be discharged into a wagon or barge trailing the harvester at either side thereof.

As herein disclosed the gear 81 is rotated through the medium of a shaft 82 operatively engaged at one end with the gear 81 and at its opposite end with the beveled gear 83 carried by a face of the gear 7.

It is also desired that the rods 50 be provided with outstanding fingers 84 which run between the tines 51. The fingers 84 are of such a length as to effectively break the earth and drag the peanuts out of the earth and sift the peanuts from the loosened soil.

While I have hereinbefore referred to the chains 47 and 73, it is to be understood that if preferred belts may be substituted therefor.

85 illustrates a suitably operated clutch whereby the gear wheel 7 may be rendered inoperative during the rotation of the axle 1.

From the foregoing description, it is thought to be obvious that a peanut digger constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. A machine of the character described comprising a driving shaft, a conveyer mechanism supported by said shaft, an elevator mechanism positioned rearwardly of the shaft upon which the conveying mechanism discharges, said elevator mechanism being mounted for rotary movement in substantially a horizontal plane, and an operative connection between the elevator mechanism and the shaft for operating the elevator mechanism independently of the rotary movement of said elevator mechanism.

2. A machine of the character described comprising a driving shaft, a conveyer operatively engaged with the shaft, a head supported rearwardly of the shaft, a rotatable table resting upon the head, an elevator mechanism engaged with the table and upon which the conveyer mechanism discharges, said elevator mechanism including an endless carrier member, a gear rotatably supported by the head and operatively engaged with the endless carrier of the elevator mechanism, and an operative connection between the gear and the drive shaft.

3. A machine of the character described

comprising a driving shaft, a conveyer operatively engaged with the shaft, a head supported rearwardly of the shaft, a rotatable table resting upon the head, an elevator mechanism engaged with the table and upon which the conveyer mechanism discharges, said elevator mechanism including an endless carrier member, a gear rotatably supported by the head and operatively engaged with the endless carrier of the elevator mechanism, an operative connection between the gear and the drive shaft, and optionally operating means for rotating the table.

4. A machine of the character described comprising a driving shaft, a conveyer operatively engaged with the shaft, a head supported rearwardly of the shaft, a rotatable table resting upon the head, an elevator mechanism engaged with the table and upon which the conveyer mechanism discharges, said elevator mechanism including an endless carrier member, a gear rotatably supported by the head and operatively engaged with the endless carrier of the elevator mechanism, and an operative connection between the gear and the drive shaft, said table being provided with a depending trunnion disposed through the head, the gear being loosely mounted upon said trunnion.

5. A machine of the character described comprising, a driving shaft, a conveyer operatively engaged with the shaft, a head supported rearwardly of the shaft, a rotatable table resting upon the head, an elevator mechanism engaged with the table and upon which the conveyer mechanism discharges, said elevator mechanism including an endless carrier member, a gear rotatably supported by the head and operatively engaged with the endless carrier of the elevator mechanism, an operative connection between the gear and the drive shaft, said table being provided with a depending trunnion disposed through the head, the gear being loosely mounted upon said trunnion, and means coacting with the trunnion for optionally rotating the table.

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

PATRICK J. FANT.

Witnesses:
D. A. STOVALL,
TERA HERNDON.

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