

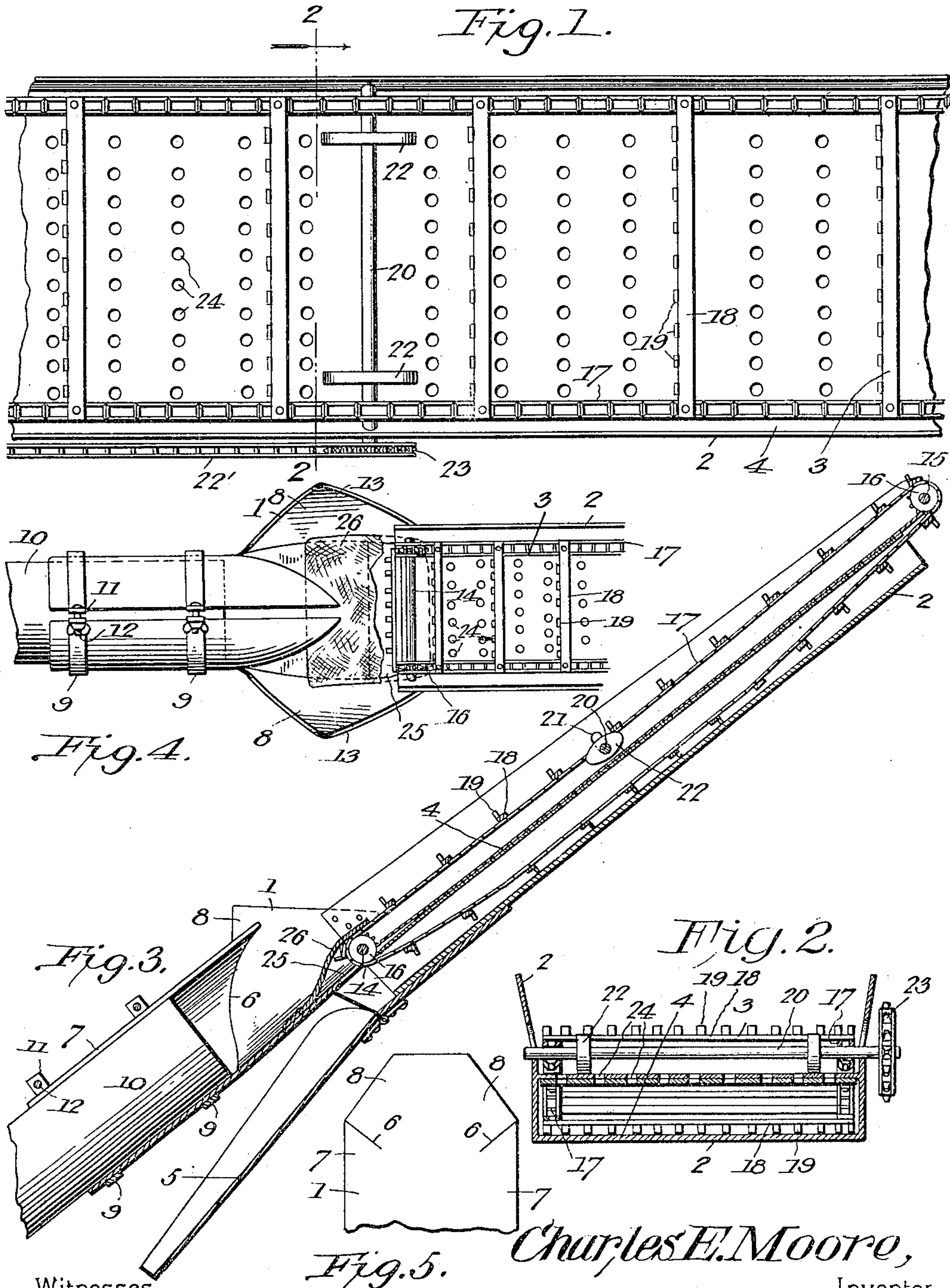
No. 807,954.

PATENTED DEC. 19, 1905.

C. E. MOORE.

STRAW STACKING ATTACHMENT FOR THRESHING MACHINES.

APPLICATION FILED MAR. 6, 1905.



Witnesses

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CHARLES E. MOORE, OF NEAR CALDWELL, OKLAHOMA TERRITORY.

STRAW-STACKING ATTACHMENT FOR THRESHING-MACHINES.

No. 807,954.

Specification of Letters Patent.

Patented Dec. 19, 1905. (Cl.)

Application filed March 6, 1905. Serial No. 248,702.

To all whom it may concern:

Be it known that I, CHARLES E. MOORE, a citizen of the United States, residing near Caldwell, in the county of Grant and Territory of Oklahoma, have invented a new and useful Straw-Stacking Attachment for Threshing-Machines, of which the following is a specification.

This invention relates to straw-stacking attachments for threshing-machines, and it has particular reference to an improved attachment for pneumatic stackers.

The principal object of the invention is to save grain, much of which is frequently lost by being blown out of or discharged from the machine along with the straw.

Another object of the invention is to simplify and improve the construction and operation of a device of this class.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had within the scope of the invention and without departing from the spirit or sacrificing the efficiency of the same.

In said drawings, Figure 1 is a top plan view showing a portion of the improved attachment. Fig. 2 is a transverse sectional view taken on the line 2 2 in Fig. 1. Fig. 3 is a longitudinal sectional view, on a reduced scale, of the improved attachment. Fig. 4 is a top plan view showing the inner end of the same. Fig. 5 is a diagram, on a small scale, of a sheet of metal from which the supporting member of the device is formed.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

The improved device consists, essentially, of a supporting member 1, a trough 2, in which is mounted an endless carrier 3, a chute 4, disposed underneath the perforated bottom of the trough, and a discharge-spout 5, connected with the lower end of the chute.

The supporting member 1 is constructed, preferably, of sheet metal, a plate of which of suitable shape and dimensions is provided with oblique incisions 6 6, forming the side members 7 7 and wings 8 8. The body of the plate with the side members 7 7, is bent to approximately cylindrical shape and provided with encircling bands 9 9, whereby it may be clamped upon the spout 10 of a pneumatic stacker, the bands 9 being provided at the ends thereof with upturned ears or lugs 11, perforated for the passage of connecting-bolts 12. The wings 8 8 extend laterally at the sides of the supporting member, which latter is overhung by the points 13 of the side members 7.

The trough 2 is bolted upon or otherwise connected with the supporting member 1 between the wings 8 8 and is thereby sustained in an inclined position, being movable with the stacker-spout 10, as will be readily understood. The said trough is provided near its lower and upper ends with bearings for shafts 14 15, carrying sprocket-wheels 16, which support the endless chains 17 of the carrier 3, said chains being connected at intervals by means of slats 18, having upstanding teeth 19. The sides of the trough afford bearings for an intermediate shaft 20, said bearings consisting of slots 21, in which the said shaft is vertically movable. Said shaft is provided with elliptical bearing members 22, bearing upon the floor of the trough. The shaft 20 is driven by means of a chain 22', connecting a sprocket-wheel 23 upon said shaft with a sprocket-wheel (not shown) upon the shaft 14 at the lower end of the trough, said shaft being in turn driven, so as to supply motion to the endless carrier from any suitable source of power.

The bottom of the trough 2 is provided with numerous apertures 24, through which grain may pass into a chute 5, disposed beneath said trough and suitably connected therewith. The lower lead of the endless carrier also passes through said chute and is thereby protected from injury. Hingedly connected with the lower end of the chute 4 is the discharge-spout 5, over which the grain may be directed into a suitable receptacle or back to the machine, if preferred.

By this invention it will be seen that straw expelled through the stacker-tube 10 is deposited at once upon the endless carrier 3, the overhanging points 13 and the side wings 8 preventing loss. The supporting member 1

is provided with a slot 25 adjacent to the trough 2 for the passage of the endless carrier, said slot being bridged by an apron 26, whereby straw is prevented from dropping through the said slot, the free end of said apron resting loosely upon the lower end of the carrier. The straw is carried in an upward direction by the carrier 3, the upper lead of which is subjected to constant vibration by the driven shaft 20, having the elliptical supporting member 22, which causes said shaft to move up and down in the slots 21, said shaft being extended entirely across the under side of the upper lead of the endless carrier, which is thereby sustained and reinforced. This vibratory movement is effective to assist the separation from the straw of any grain contained therein, the grain passing through the apertures 24 into the tube 4, whence it escapes over the spout 5. In this manner a large proportion of grain which is otherwise lost may be saved and the straw is prevented to a great extent from scattering as it leaves the machine.

The construction of the device is simple, and it may be attached to any ordinary pneumatic stacker and operated at no great expense.

Having thus described the invention, what is claimed is—

1. In a grain-saving attachment for pneumatic stackers, a supporting member consisting of a plate having curved side members adapted to embrace a stacker-tube and laterally-extended side wings, and a carrier-trough secured to said plate between said side wings.

2. In a device of the class described, a supporting member consisting of a plate having oblique incisions forming side members which are curved upwardly to embrace a stacker-tube, and laterally-extended wings overhung by the points of the side members.

3. In a device of the class described, a supporting member having curved side members embracing a stacker-tube and laterally-extending side wings, a carrier-trough connected with said supporting member between the wings thereof, and an endless carrier supported by said trough; the supporting member being provided with a slot for the passage of said endless carrier, and a flexible apron extending over said slot and resting upon the carrier.

4. A supporting member, a carrier-trough connected therewith and having a perforated bottom, a chute connected with the under side of said bottom, an endless carrier supported for movement over the trough and through the chute, a transversely-disposed driven shaft supported for vertical movement in the sides of the trough below the upper lead of the carrier which is supported upon said shaft, and non-circular supporting members upon said shaft engaging the bottom of the trough.

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

CHARLES E. MOORE.

Witnesses:

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H. C. QUICK.