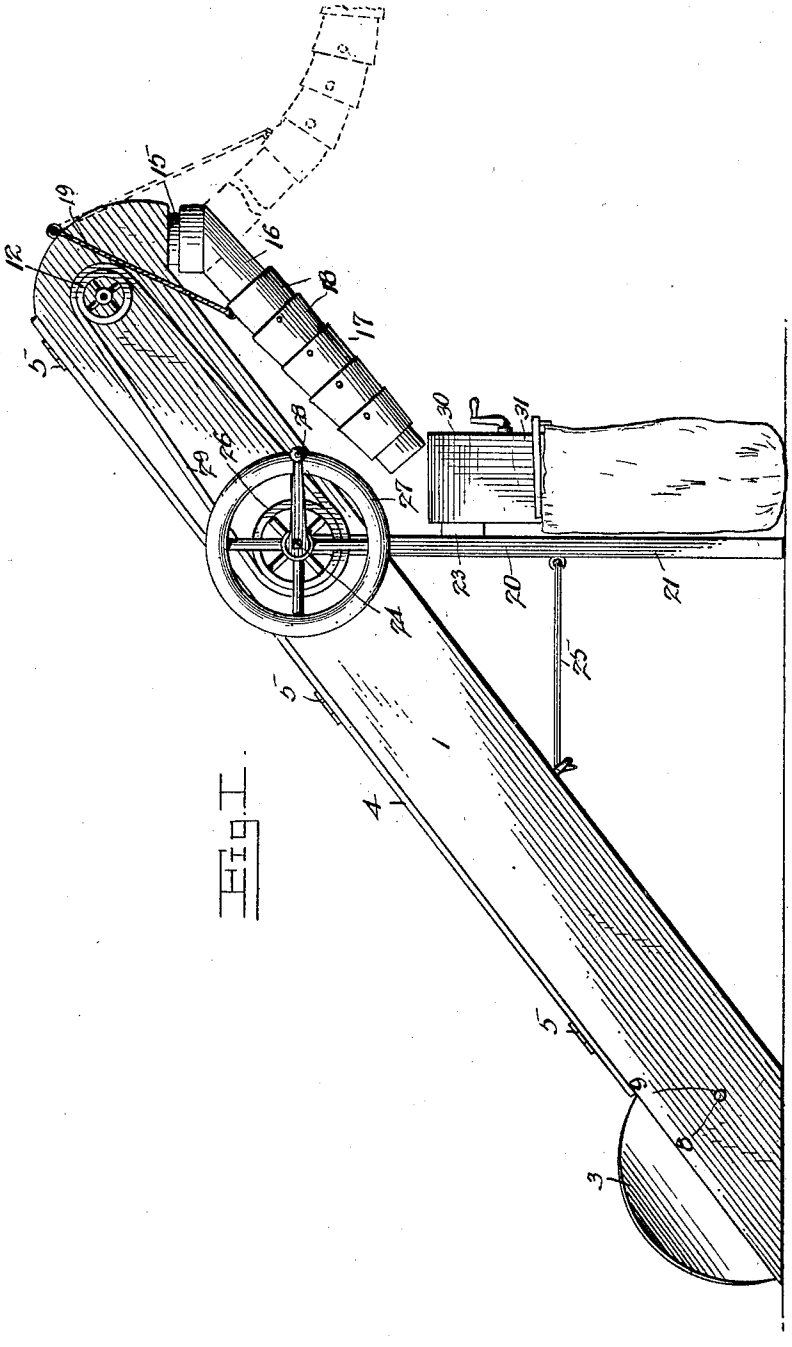
No. 690,001. Patented Dec. 31, 1901.

L. E. WEEKS.

GRAIN ELEVATOR.

(Application filed June 18, 1901.)

(No Model.) 2 Sheets—Sheet 1.



Witnesses
F. C. Allen.
J. W. Garner

L. E. Weeks, Inventor
by C. A. Snow & Co
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 690,001. Patented Dec. 31, 1901.

L. E. WEEKS.

GRAIN ELEVATOR.

(Application filed June 18, 1901.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 1.

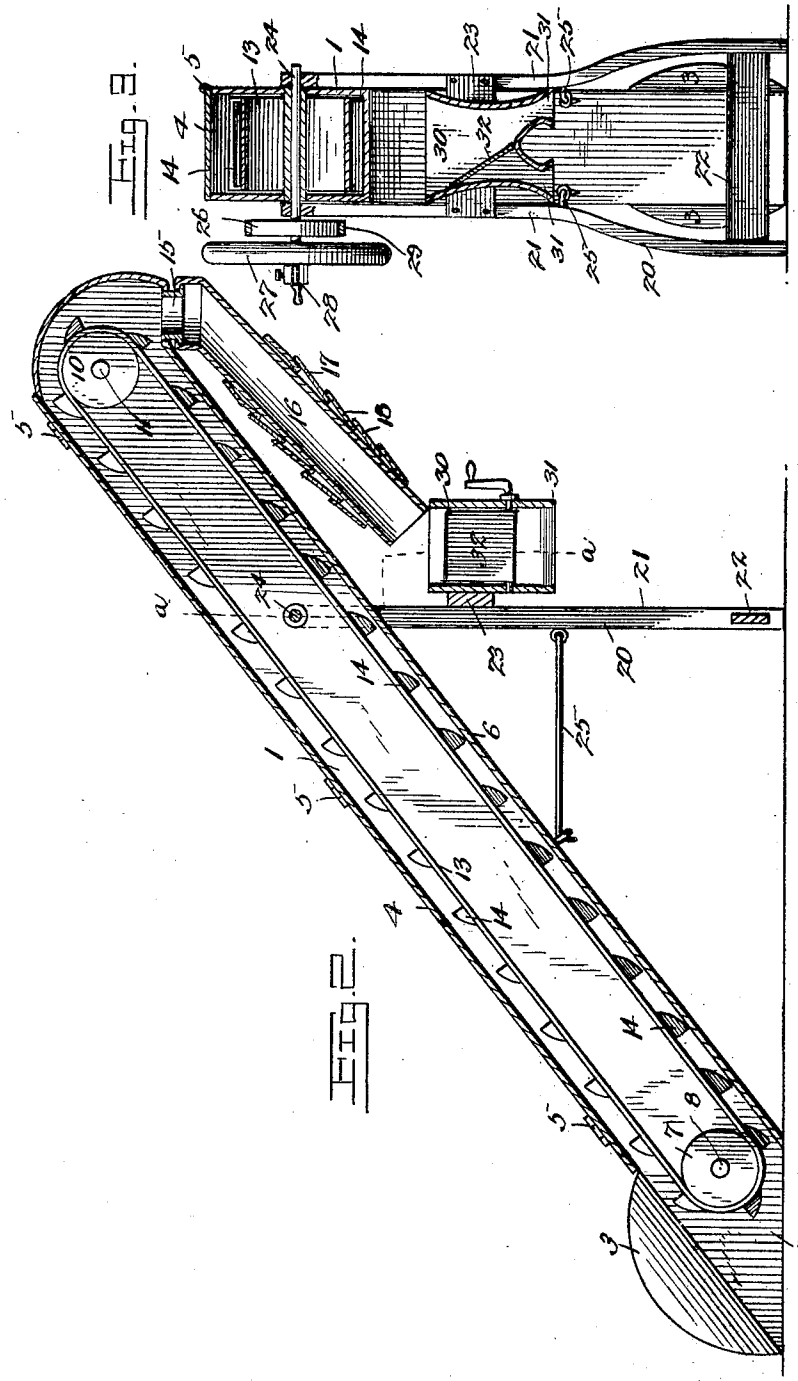


Fig. 2.

Witnesses
F. E. Alden.
J. C. Garner

L. E. Weeks, Inventor.
by C. A. Snow & Co.
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LEWIS E. WEEKS, OF DARFUR, MINNESOTA.

GRAIN-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 690,001, dated December 31, 1901.

Application filed June 18, 1901. Serial No. 65,065. (No model.)

To all whom it may concern:

Be it known that I, LEWIS E. WEEKS, a citizen of the United States, residing at Darfur, in the county of Watonwan and State of Minnesota, have invented a new and useful Grain-Elevator, of which the following is a specification.

My invention is an improved grain-elevator adapted especially for use on farms in loading and unloading grain-wagons and for conveying grain from a wagon to a bin or from a bin to a wagon and to be operated manually.

One object of my invention is to effect improvements in the construction of the trunk of the elevator, whereby the lower end of the elevator-trunk may be placed directly in a grain-bin, so that the grain will flow into the same and avoid the necessity of shoveling the same from the bin to the elevator-trunk.

A further object of my invention is to effect improvements in the construction of the supporting-frame of the elevator, whereby the same may be compactly disposed when not in use.

In the accompanying drawings, Figure 1 is a side elevation of a grain-elevator constructed in accordance with my invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a vertical transverse sectional view of the same, taken on a plane indicated by the line *a a* in Fig. 2.

The trunk 1 of the elevator is open at its lower end, as at 2, whereby it is adapted to be placed directly in a grain-bin, so that the grain will by gravity flow into the lower open end of the trunk. On the sides of the trunk, at the lower end thereof, are oppositely-inclined wings 3, which facilitate the shoveling of grain into the lower end of the trunk, which must be done when the grain in the bin runs so low that it will no longer flow into the trunk. The upper side of the trunk is covered from a point immediately above the wings 3 to the upper end of the trunk by a lid 4, which is hinged at one side, as at 5, and is thereby adapted to be opened to permit access to the interior of the trunk. The lower side of the trunk is closed by the bottom 6.

In the trunk, near the lower end thereof, is a drum 7, the spindles 8 of which are journaled in bearings 9 in the sides of the trunk. Near the upper end of the trunk is a similar drum 10 on a shaft 11, which shaft is journaled in bearings in the sides of the trunk, projects beyond one side of the trunk, and is provided with a pulley 12. An endless belt 13, which may be constructed of any suitable material, connects the drums 7 and 10 and carries on its outer side a number of elevating-cups 14, which are regularly spaced apart. At the upper end of the trunk, on the lower side thereof, is a vertical pipe or sleeve 15 of suitable length and diameter, to the lower end of which is swiveled an elbow discharge spout or pipe 16, which may be turned in any direction, as will be understood. An extension 17, which comprises a series of flexibly-jointed elbow-sections 18, is placed on the spout 16 and adapted to slide thereon and to be extended outward therefrom, as is indicated in dotted lines in Fig. 1, to lengthen the said spout 15 and adapt the same to discharge the grain at any desired point. A cord 19 is attached to the flexible extension of the spout 16 to support the same at any desired adjustment on the said spout.

I provide a supporting-frame 20 for the upper portion of the elevator-trunk, which supporting-frame comprises a pair of standards 21, a cross-bar 22, which connects them together near their lower ends, and a cross-bar 23, which connects them together at a suitable height. The upper ends of the said standards are disposed on opposite sides of the elevator-trunk and are pivotally connected to a power-shaft 24, which extends through the sides of the trunk and is journaled therein, as shown. Thereby the frame 20 may be folded against the under side of the elevator-trunk and compactly disposed when the elevator is not in use. Hooks 25 or other suitable devices are provided to connect the standards 21 to the lower side of the elevator-trunk and support the said standards in a vertical position, as shown in the drawings. On the shaft 24 is a pulley 26. A fly-wheel 27 and a hand-crank 28 are also secured to said shaft 24. An endless belt 29 connects the pulleys 12 and 26 and transmits power from the shaft 24 to the endless traveling element of the elevator, as will be understood.

The sacker 30 is attached to cross-bar 23 and comprises a hopper having a pair of descending discharge-spouts 31, each of which

is adapted for the attachment of a sack thereto. A valve 33 is provided, which is adapted to cut off either of the spouts 31, as shown in Fig. 3. Hence one sack can be removed while another is being filled, and therefore the machine may be kept continuously in operation. It will be observed by reference to the drawings that the spout 15 is adapted to discharge the elevated grain into the sacker.

Having thus described my invention, I claim--

1. A grain-elevator of the class described, having a folding supporting-frame for the trunk, a sacker carried by said supporting-frame, and a discharge-spout to convey grain from the upper portion of the trunk to said sacker, substantially as described.

2. In a grain-elevator of the class described, the combination of a trunk, a carrier element therein comprising an endless belt and drums on which the belt operates, said drums being disposed at the ends of the trunk, a power-shaft disposed transversely of the trunk at a point intermediate of the drums, and journaled in bearings in the sides of said trunk, said shaft having means whereby it may be rotated and having a pulley, a pulley with which one of said drums is provided, an endless belt connecting said pulleys, whereby power may be transmitted from said power-shaft to said carrier, and a supporting-frame for the said trunk, the said supporting-frame having its upper end pivoted to said power-shaft, whereby said supporting-frame may be folded under said trunk, substantially as described.

3. A grain-elevator of the class described, comprising a trunk, an endless traveling carrier element therein, a frame to support the upper portion of the trunk, said frame comprising a pair of standards and cross-bars connecting said standards, the latter being pivotally connected at their upper ends to the trunk, means to connect the standards to the lower side of the elevator-trunk, to support said standards in an upright position, a sacker supported on one of said cross-bars and a flexible discharge-spout depending from the upper end of said elevator-trunk, substantially as described.

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

LEWIS E. WEEKS.

Witnesses:
J. O. LYSNE,
C. N. SONNESYN.