

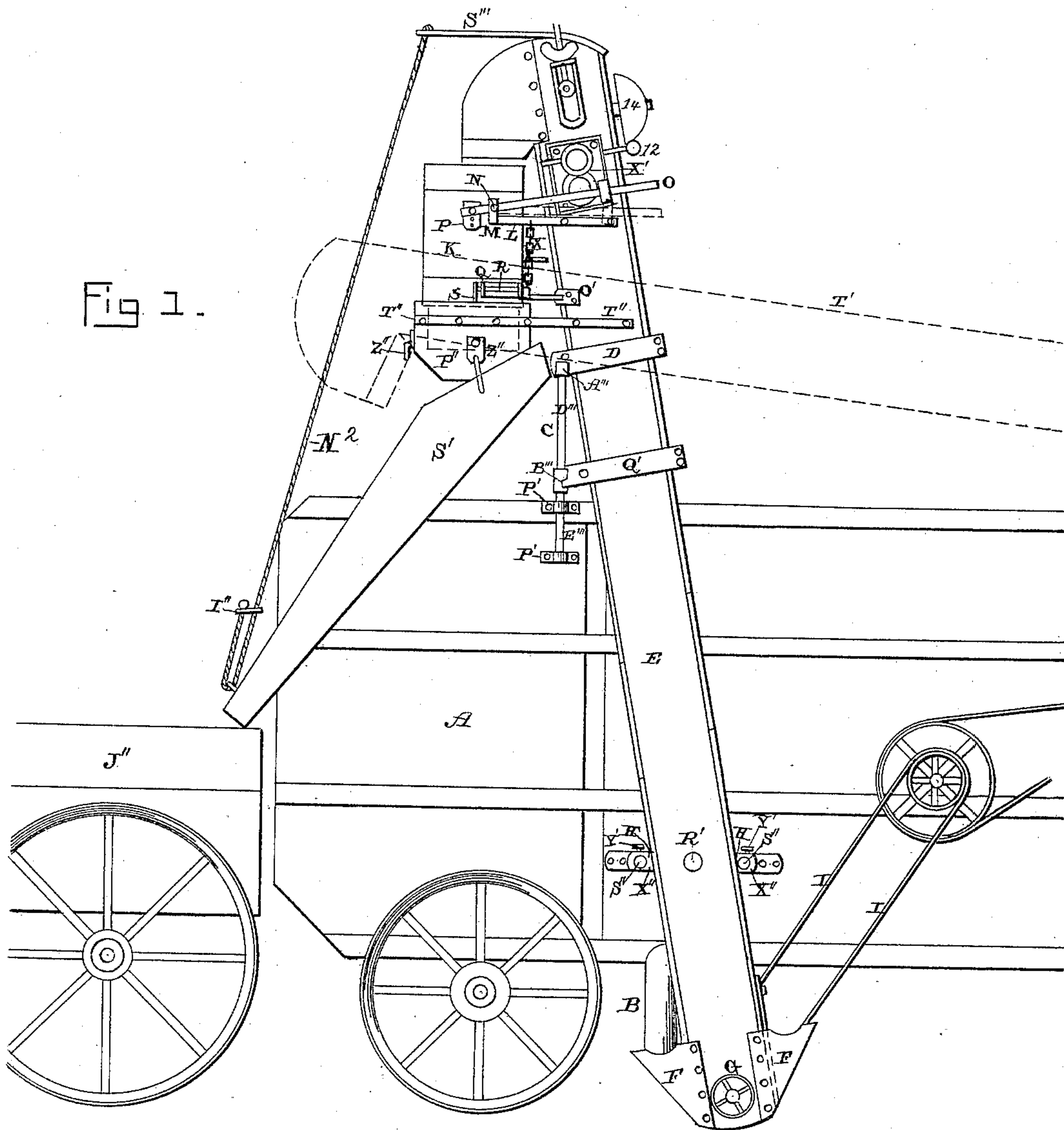
(No Model.)

2 Sheets—Sheet 1.

H. M. FULWIDER.
GRAIN ELEVATOR.

No. 436,348.

Patented Sept. 16, 1890.



Witnesses:

E. P. Ellis,
L. L. Burkett.

Inventor:

Horace M. Fulwider,

per

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(No Model.)

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Fig. 2.

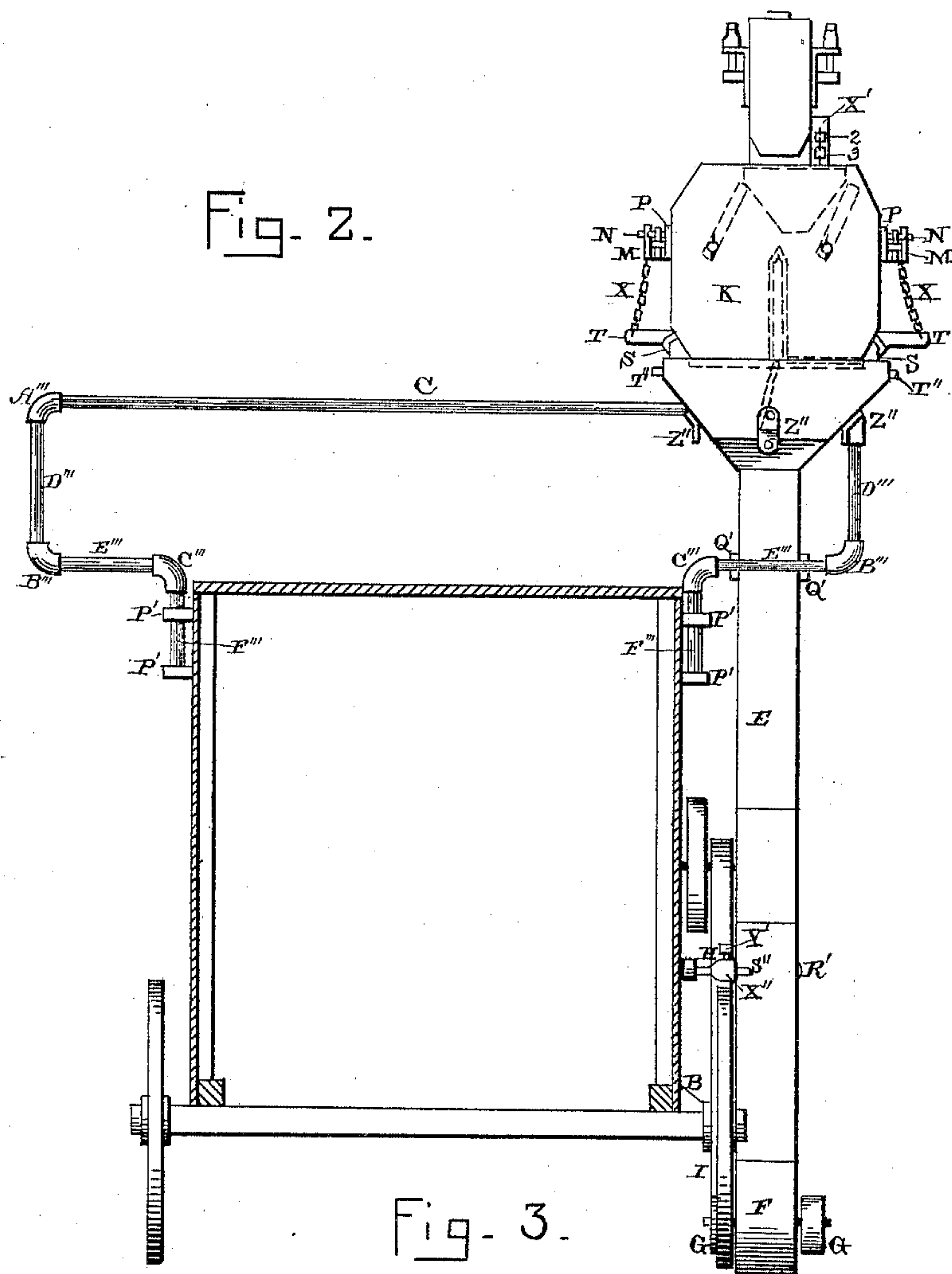
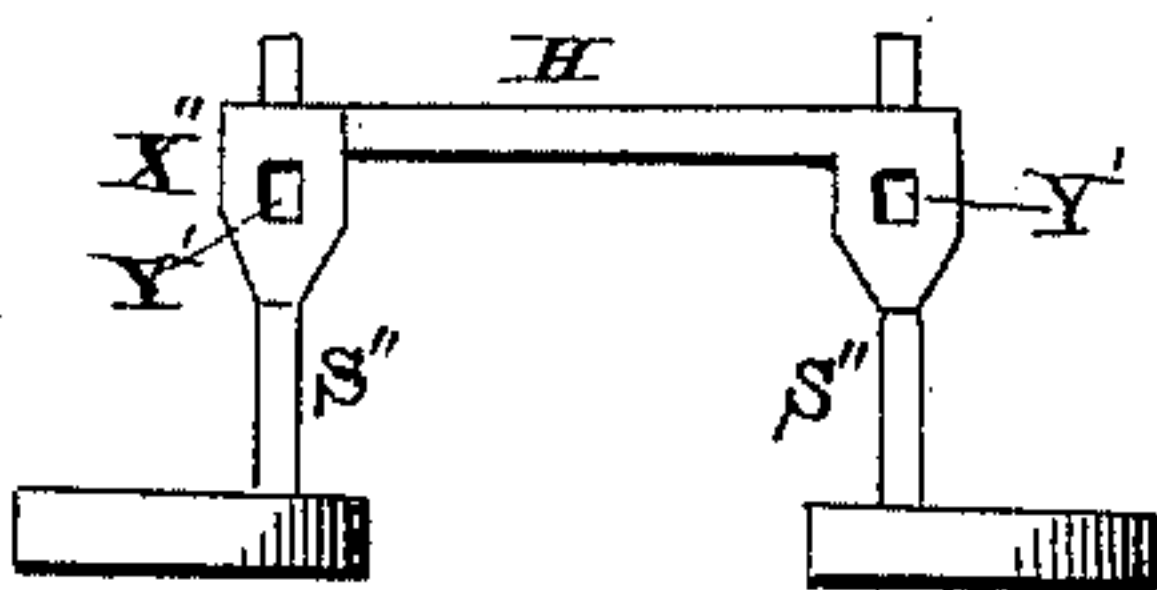


Fig - 3.



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UNITED STATES PATENT OFFICE.

HORACE M. FULWIDER, OF REDMON, ASSIGNOR OF ONE-FOURTH TO JACOB McVAY, OF BORTON, ILLINOIS.

GRAIN-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 436,348, dated September 16, 1890.

Application filed January 4, 1889. Serial No. 295,399. (No model.)

To all whom it may concern:

Be it known that I, HORACE M. FULWIDER, of Redmon, in the county of Edgar and State of Illinois, have invented certain new and useful Improvements in Grain-Elevators; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in grain-elevators, which may be used on either side of the thrashing-machine and folded on top of the thrasher when moved from place to place, and which elevator as the grain issues from the thrasher elevates the grain so as to deliver it into a weighing and measuring machine, or will empty it directly into a trough or support to be conveyed to a wagon or any other receptacle placed to receive it. The improvements consist, mainly, in the support by which the elevator is attached to the thrasher and upon which it can be moved from one side of the thrasher to the other, and in the construction by which the elevator can be folded upon the top of the thrashing-machine while the thrasher is being moved from place to place.

Figure 1 is a side elevation of an elevator attached to the side of a thrashing-machine and embodying my invention. Fig. 2 is an edge view of the elevator, the thrashing-machine being shown in section. Fig. 3 is a detail view showing the clamp.

In the accompanying drawings, A indicates the side of a thrashing-machine, and B the discharge-spout of the same. A pipe C extends across and is fastened to the top of the thrasher by means of the clamps P', and this pipe supports the elevator, as shown in Figs. 1 and 2. On each side of the elevator E, about half-way between its center and upper end, are bolted the bars D, and through these bars the gas pipe or frame C passes. The bars D consist of flat pieces, which are clamped to opposite sides of the elevator and are perforated at their inner ends so that the pipe C will pass through them. These bars form a part of the pivot or hinge upon which the

elevator turns as it is being moved into the position shown in dotted lines in Fig. 1, or to the opposite side of the thrasher.

The elevator E and weigher are supported upon the frame C, which is formed entirely of gas-pipe for the sake of lightness, strength, and cheapness. The upper portion of this frame is made perfectly straight to allow the cast pieces D on the elevator to be moved on it when it is desired to change the measurer and elevator from one side to the other or fold it upon the top of the thrasher. When the elevator and its attachments are to be folded on the top of the thrasher, the parts will be moved along to the center of the frame C only; but if the parts are to be changed from one side of the thrasher to the other then the elevator and the spout S' must be raised at their lower ends, so as to pass over the top of the thrasher.

To each end of the horizontal portion of the frame is secured an elbow A'', and into these elbows are screwed the vertical pipes D'', which have their lower ends attached to other elbows B''. To the inner ends of the elbows B'' are connected the pipes E'', which extend inwardly toward the thrasher, and the inner ends of the pipes are attached to the elbows C'', and from these elbows C'' depend the pipes F'', which catch in the clamps P', secured to the side of the thrasher. The pieces of pipes E'' are made of sufficient length to allow the elevator and weigher to be moved out from the side of the thrasher to allow the pulley G on the lower end of the elevator to be properly lined with the pulley it is driven by. The elbows A'' are always situated on the outside of the elevator in order that the elevator and weigher may be slipped along the upper portion of the frame over the top of the thrasher in changing from side to side without removing the elevator and cast pieces D from the frame. If the elbows A'' were placed upon the inside of the elevator, they would interfere with moving the elevator across the thrasher.

In order that the elevator may be held perfectly firm in its place, a rest Q' is clamped upon each side of the elevator-casing, and one end of each of the rests bears against the lower angle of the gas-pipe C. These rests

Q' consist of flat strips, which are secured to opposite sides of the elevator, and which bear against the pipe merely to brace and hold the elevator in position and take some of the strain off of the bars D.

Near the lower edge of the thrasher are secured two supporting-rods S'', which extend horizontally from the side of the thrasher, and in contact with the inner side of the elevator is a plate H, which is provided with perforations at each end, and through which the rods S'' pass. At each end of the plate H is formed a perforated hub X'', and through these hubs pass set-screws Y', for the purpose of clamping the plate H rigidly in position upon the rods S''. The plate H being in contact with the inner side of the elevator, and the rods S'' being made to project any desired distance outward, the elevator can be adjusted back and forth upon the rods and secured in any desired position. Either the bolt R', that serves to steady the lower portion of the elevator, may be made to pass through the plate H or it may be secured to the plate and made to project from its center. If made as a part of the plate H or rigidly secured thereto, the plate H will not be secured directly to the elevator, but will simply form a support for the bolt R', as may be desired.

In order that this elevator may be attached to any or all makes of thrashing-machines, it is necessary that it should be provided with two inlets F at its lower end.

The elevator is of the well-known chain-and-bucket class, and is driven from its lower end by an endless belt I, one end of which passes around the pulley G, and the opposite end around a driving-pulley, which may be keyed on the shaft with any suitable pulley on thrasher.

As it is my object to use this elevator on either side of thrasher, as may be desired, it is necessary that the elevator should be provided with a pulley G on each side of its lower end, and the elevator should always be driven by the one which lies next to thrasher.

No claim is made in this application to a grain-elevator for attachment to a thrashing-machine, said elevator extending from near the bottom of the machine to a point above

the top of the same, and pivoted intermediate its ends to the machine by a horizontal pivot extending outward from the side thereof, and said pivot forming the sole support for the elevator when in its operative position.

Having thus described my invention, I claim—

1. The combination of a thrashing-machine and a supporting-frame which extends across the top of the machine with an elevator which is pivoted directly upon the frame and provided with a pivotal connection, whereby the elevator can be slid from one side of the frame to the other or be supported upon its top during transportation, substantially as shown.

2. The combination of a thrasher and a suitable supporting-frame C, which extends above and across said machine and furnishes a pivotal support for the bars, and whereby they may be slid the full length of the frame, with an elevator provided with said bars D, which form a part of the hinge or pivot upon which the elevator turns, substantially as described.

3. The combination of the thrashing-machine and a supporting-frame which extends horizontally across its top with the elevator provided with the supporting-bars D and the rests Q', which have their ends to bear against the supporting-frame, substantially as set forth.

4. The combination of the thrasher and the elevator with the rods S'', which project from the thrasher, the plate H, placed upon the rods, and the bolt R, which extends through the elevator near its lower end, substantially as specified.

5. The combination of the elevator provided with two inlets F, with the shaft which extends through its lower end and is provided with a pulley G on each of its ends, the driving-belt I, and a driving mechanism whereby said elevator is adapted for use on either side of a thrashing-machine, substantially as shown.

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

HORACE M. FULWIDER.

Witnesses:

M. V. BARR,
WM. HENN.