(No Model.)

J. J. COX.

STRAW STACKER.

No. 290,975. Patented Dec. 25, 1883.

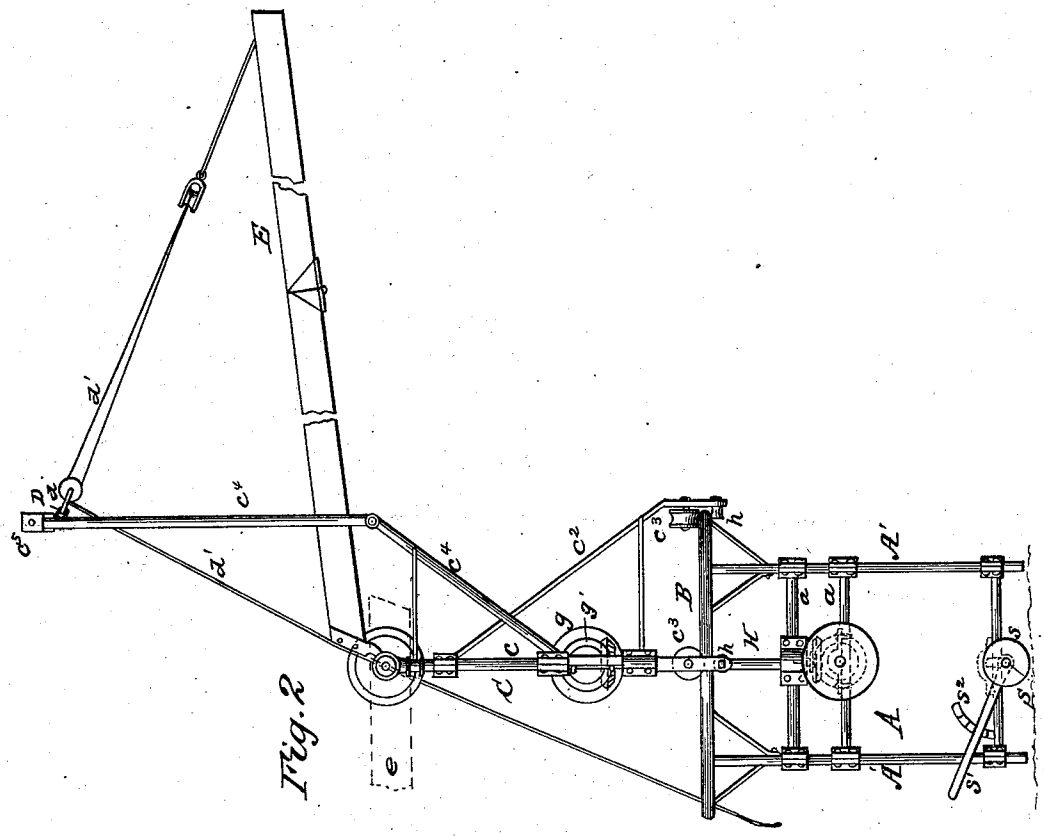


Fig. 2.

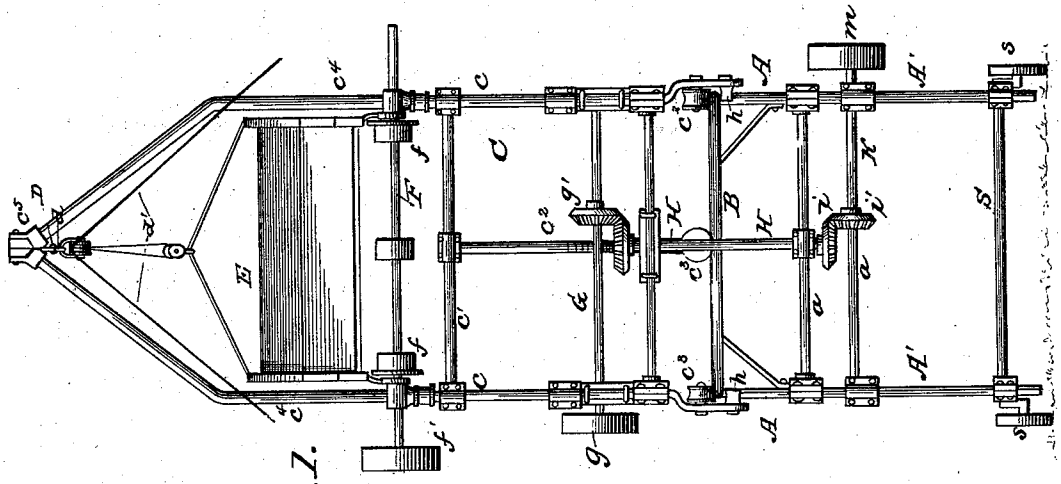


Fig. 1.

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JOSEPH J. COX, OF LAWRENCE, KANSAS.

STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 290,975, dated December 25, 1883.

Application filed May 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH J. COX, of Lawrence, county of Douglas, and State of Kansas, have invented certain new and useful Improvements in Straw-Stackers, of which the following is a full, clear, and exact description.

My invention relates to that class of straw-stackers which are used in conjunction with a thrashing-machine, and its object is to provide means for conveying the straw, as it is dropped from the straw-carrier of the thrasher, to the rick, where it is desired to stack same.

My invention consists in the mechanism for attaining said object, hereinafter described and claimed.

In the drawings, Figure 1 represents a front elevation of my improvement; Fig. 2, a side elevation.

A′ represents the uprights of the fixed portion of the frame A. Said uprights are four in number, and are preferably constructed of gas-pipe. These uprights are held together by braces *a*, which also carry bearings for the driving-shafts of the machine. The said uprights have secured to their upper extremities a circular track, B, also constructed, preferably, of gas-pipe. Upon this track revolves the movable portion C of the frame. Said movable portion is constructed of the uprights *c*, provided with suitable cross-pieces, *c′*, and the oblique standard c^2, attached at its upper extremity to the upper cross-piece, *c′*, and connected by braces with the uprights *c*. The lower extremities of said rods *c* c^2 are provided with bearings for the rollers c^3, which are concaved to fit the track B. By means of said rollers the movable portion C of the frame is enabled to revolve upon the track B.

h represents studs or rollers on uprights *c* c^2, projecting beneath the circular rail, to prevent the movable portion of the frame being tipped off from the rail.

Attached to the lower part of the uprights *c*, and extending backward and upward therefrom, are the bent arms c^4. Said arms are provided with braces extending from the upper parts of uprights *c*, and their upper extremities are joined and secured together by means of clamp-plates.

Revolving in clamp-plates c^5 is a swivel, D, provided with a ring, *d*, to which a pulley is attached, and through the latter pass ropes *d′*. The outer ends of these ropes are secured to rings borne by the straw-carrier E, and their inner ends, after passing around the pulley, extend downwardly and are operated by the hands of the workman. The carrier E is therefore suspended at one end from the swivel in the top of the bent arms c^4. The carrier E is also attached to a shaft, F, having bearings in the upper portion of the frame C. The carrier is provided with an endless belt or other suitable means for carrying the straw, and said belt is actuated by wheels *f*, which are revolved by means of a belt passing about pulley *f′* and pulley *g*, borne by shaft G.

The aforesaid carrier E is composed of two sections which are hinged together, and the outer section may be folded under and the whole carrier allowed to rest against the back of the frame A′. The arms c^4 are likewise hinged, (above the braces which connect them with the upright *c*,) and also fold downward upon the back of frame A. The inner end of said carrier E is provided with a chaff-pan, *e*, which lies under it and extends some distance beyond its line of joinder with the frame, and is adapted to lie beneath the straw-carrier of the separator and act as a chaff-collector. Upon said shaft G, near its middle, is a bevel-gear wheel, *g′*, whose teeth mesh with those of a second bevel-wheel borne by the central vertical shaft, H. Said shaft H has bearings in the braces *a*, and carries upon its lower extremity a bevel-pinion, *i*, gearing with a pinion, *i′*, borne by the driving-shaft K. Said driving-shaft is furnished upon one of its extremities with a large pulley, *m*, to which power is imparted by means of a belt from the thrashing-machine.

About two and one-half feet above the level of the ground a crank-axle, S, is journaled in supports carried by the frame A. The outer ends of this crank-axle carry spindles for the wheels *s*, on which the stacker runs when moved from place to place. Attached to this crank-axle is a lever, *s′*, by which said wheels *s* are raised from or lowered to the ground. The edge of this lever is adapted to engage with the teeth of the rack s^2, by which the aforesaid wheels are held securely in any position they may be placed.

The operation of my invention is as follows: The frame is placed in proximity to the straw-

carrier of the thrasher. The straw-carrier E is placed in position to catch the straw as it passes out of the carrier of the thrasher. Motion is imparted to the endless belt or other carrying device of the straw-carrier by means of the mechanism before described, and the straw is passed through the carrier E to the stack. The carrier E, by revolving the upper portion of the frame C, is brought over that part of the rick where it is desired to deposit the straw, and is made from time to time as the formation of the rick proceeds. When it is desired to move the stacker from place to place, the ropes d' are loosened and the bent supports c and the straw-carrier E, are allowed to swing downward on their hinges and rest against the back of the frame A'. The lever s' is operated, and the wheels thereby forced against the earth and the stacker raised from the ground. The stacker is then drawn from place to place in the rear of the separator, to which it may be permanently coupled.

Having thus described my invention, what I claim is—

1. The combination, with the fixed frame having a circular rail secured on its top, of a rotary supporting-frame, a straw-carrier, grooved rollers journaled on said rotary frame supporting the same on said circular track, and studs or pulleys mounted on the rotary frame to project beneath said rail, whereby the rotary frame may rotate upon the rail of the lower frame and be held from tipping therefrom, as shown and described.

2. The combination, with the frame A, of the crank-axle S, wheels s, lever s', and the rack s^2, substantially as described.

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Witnesses:
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