

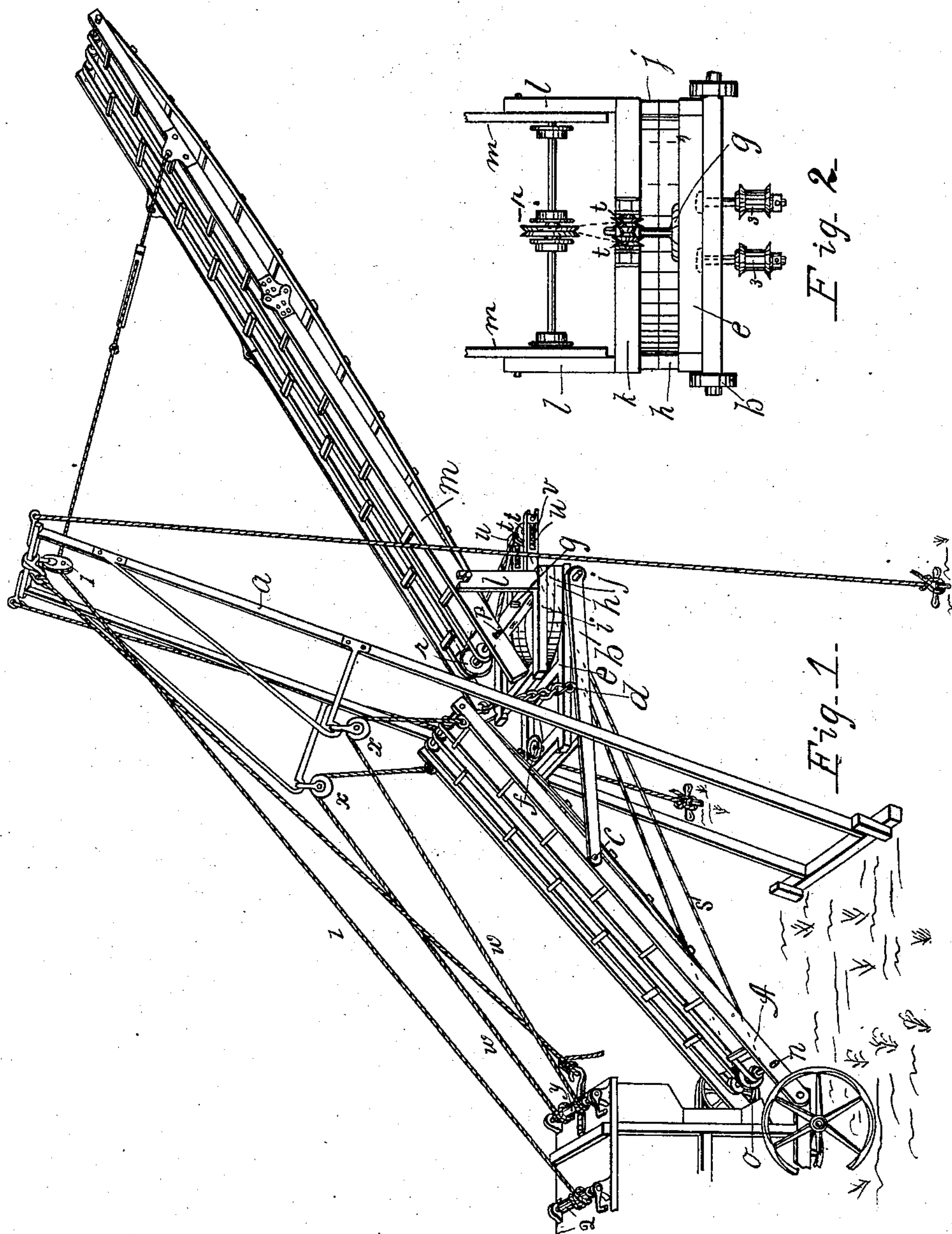
(No Model.)

J. F. & W. N. SPRINGER.

STRAW STACKER.

No. 287,882.

Patented Nov. 6, 1883.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES F. SPRINGER AND WILLIAM N. SPRINGER, OF INDIANAPOLIS, IND.

STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 287,882, dated November 6, 1883.

Application filed August 6, 1883. (No model.)

To all whom it may concern:

Be it known that we, JAMES F. SPRINGER and WILLIAM N. SPRINGER, citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improved Straw-Stacker, of which the following is a specification.

Our invention relates to improvements in that class of straw-stackers which have a straw-carrier adapted to oscillate horizontally about a fixed vertical pivot.

The objects of our improvements are, first, to provide an improved means for supporting the oscillating straw-carrier; and second, to provide an improved means for driving the same.

The accompanying drawings illustrate our invention.

Figure 1 is an elevation in perspective. Fig. 2 is an end elevation of the straw-carrier support.

A represents the ordinary straw-carrier of a thrashing-machine.

b is a light frame, pivoted to A on each side, at c, and suspended by a chain, d, from each side of the end of A. Between the outer ends of frame b is pivoted another frame, e, the rear or free end of which is adjustable vertically in relation to frame b by means of a screw, f.

Secured rigidly upon the upper surface of frame e is a vertical pivot-pin, g, and a semi-circular annular rib, h, concentric with said pin.

i is a frame having an annular rib, j, corresponding to rib h, and a cross-timber, k, through which pin g passes. Said ribs h and j form narrow bearing-surfaces concentric with pin g.

The oscillating straw-carrier m is mounted, by means of a pin secured to each side, on uprights l l, erected on frame i. Instead of the usual conveyer-belt, occupying the whole width of the straw-carrier troughs A and m, we employ in each case two conveyer-belts, side by side, having a central space between them, for the purpose of permitting the use of a central driving-belt. On the driving-shaft n, between the two conveyer-belts, we place a grooved pulley, o, and on the driving-shaft p we place a similar pulley, r. A belt, s, passes from pulley o between the vertical

idlers 3 3, which are mounted on pivots secured to the under side of frame e and over idlers t t to pulley r. Said idlers t t are mounted in bearings adapted to slide in timbers u u, projecting from frame i. A spring, v, is placed behind each bearing and forces it constantly outward. The free ends of both straw-carriers are suspended from a derrick, a. Ropes w w, passing from carrier A over pulleys x x to a windlass, y, mounted on the thrasher-support carrier A and the base of carrier m, and a rope, z, passing over a pulley, 1, to a windlass, 2, supports the free end of carrier m.

The operation of our stacker is as follows: The carriers A and m are placed nearly level, and power is applied to drive shaft n. The conveyer-belts on A are carried forward, and the conveyer-belts on m are also driven by belt s. As the carrier m is oscillated from side to side to distribute the straw, frame i turns on frame e about the pivot g, the belt s being prevented from running off idlers t t by the vertical idlers 3 3. As the height of the stack increases the free end of carrier A is raised by windlass y and ropes w w, at the same time raising carrier m bodily, and as the height of the stack is still more increased the free end of carrier m is raised by windlass 2 and rope z. When the free end of m is raised, the belt s is kept taut by the springs v, moving the idlers t t outward.

We claim as our invention—

1. In a straw-stack, the combination, substantially as specified, of a primary straw-carrier hinged to a thrashing-machine, a secondary straw-carrier adapted to turn about a vertical pivot, and a support for said pivot, and said secondary straw-carrier suspended from the free end of said primary straw-carrier.

2. In a straw-stack, the frame b, vertical idler-pulleys 3 3, frame e, pivot-pin g, frame i, annular ribs h and j, straw-carrier m, driving-shafts n and p, belt s, grooved pulleys o and r, and idler-pulleys t t, mounted in yielding bearings, all combined and arranged to co-operate substantially as specified.

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Witnesses:

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