W. DEETZ.

STRAW STACKER.

No. 187,522. Patented Feb. 20, 1877.

Fig. 1.

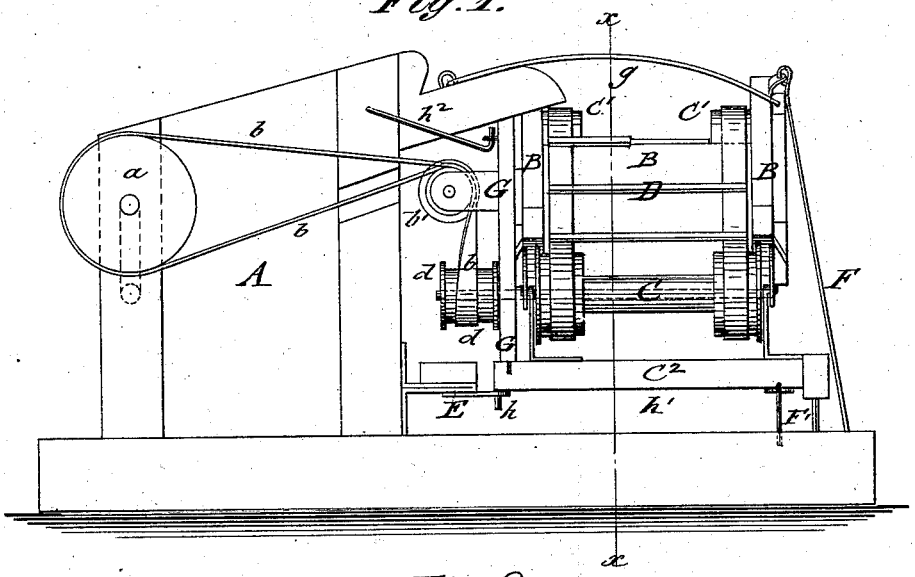


Fig. 2.

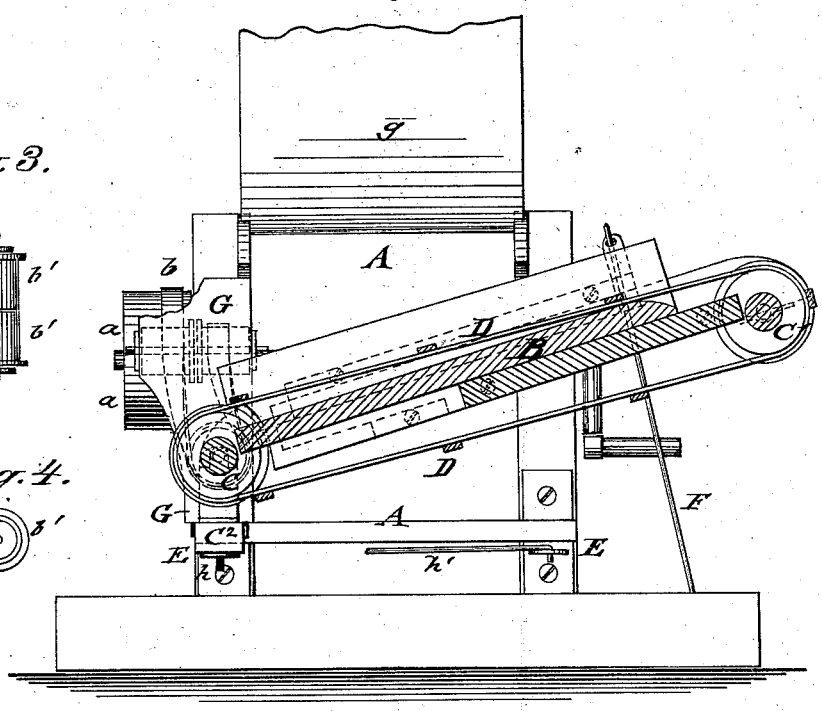


Fig. 3.

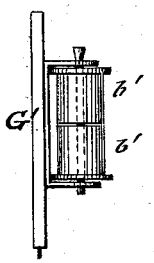
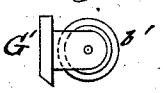


Fig. 4.



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UNITED STATES PATENT OFFICE

WILLIAM DEETZ, OF SALTILLO, OHIO.

IMPROVEMENT IN STRAW-STACKERS.

Specification forming part of Letters Patent No. **187,522**, dated February 20, 1877; application filed October 23, 1876.

To all whom it may concern:

Be it known that I, WILLIAM DEETZ, of Saltillo, in the county of Holmes and State of Ohio, have invented a new and Improved Straw-Carrier, of which the following is a specification:

In the accompanying drawing, Figure 1 represents an end view of my improved straw-carrier; Fig. 2, a vertical longitudinal section of the same on line *x x*, Fig. 1; and Figs. 3 and 4 are detail side and end views of the belt-guiding pulleys.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

In the drawing, A represents a thrashing-machine, of any approved construction, to the beater-shaft of which a pulley, *a*, is applied, that connects, by a belt, *b*, and guide-pulleys *b'*, with a pulley, *d*, on the shaft of the driving roller or cylinder C of the straw-carrier B. The carrier B is made of two sections, which are adjustable to different lengths by means of side guide-pieces and fastening-screws, so that the same may be lengthened or shortened, according to the distance and height to which the straw has to be conducted for storage or stacking. An endless belt, D, made of two or more endless leather bands, *e*, and transverse strips or pieces *e'*, passes over enlarged parts of the driving and stretching rollers C C^1, and takes up the straw and conveys it up along the carrier to the upper end for dropping.

The straw-conveying belt D may be extended by additional sections of different lengths, which are attached by hooks and eyes, rivets, or otherwise, to the length to which the sections of the carrier are adjusted, so as to work readily and with equal facility for different distances and inclinations to which the carrier may be set.

The driving-roller C turns in bearings of a lateral base-piece, C^2, and the stretching-roller in bearings of the upper section, suitable guard-pieces at both sides serving to keep the straw on the carrier while traveling up with the endless belt. The straw is conveyed from the thrasher along a suitable incline and a pivoted hood or cover, *g*, that may be swung up when desired onto the carrier. The carrier B is attached at the lower part, by a hook-pin, *h*, and brace-rod h^1, to fixed brackets or supports E of the thrasher-frame, and supported at any desired inclination by upright rods F, applied to the upper part. Rigid supports or legs F' at the lower front part secure, in connection with the uprights and brace-rods, the rigid position of the carrier in whatever direction the same may be run from the thrasher, the supporting and stiffening rods being merely transposed from one side to the other, and adapted to the position of the carrier when the same is placed in position to run to either side or in straight direction from the machine.

The belt-and-pulley connection of the carrier with the thrasher-shaft is accomplished by upright pulley-standards G G', of which one is used with horizontal pulleys, when the carrier is intended to convey the straw in one direction, while the other is used with vertical pulleys and a transmitting-belt of greater length when the carrier is intended to convey the straw in opposite direction. The transmitting-belt *b* is arranged in one case, as shown in Figs. 1 and 2, by being first passed over the two horizontal pulleys *b* of standard G, the pulleys being placed with the rims together, as indicated in Fig. 2, to serve as guides for the belt passing from the same to the pulley of the driving-roller. The standard G is slotted, to be placed over the shaft of the stretching-roller, and is seated by bottom pins in sockets or eyes of a lateral supporting-piece of the carrier. The upper part of standard G is locked by brace-rod h^2 to the thrasher-frame. The belt *b* and double pulleys *b'* of standard G serve thus to transmit the power to work the carrier when the driving-roller of the carrier is on the same side on which the belt and driving-pulley of the thrasher are arranged; but when the carrier is reversed to run in opposite direction, with the driving-roller of the carrier at the opposite side to that of the belt and pulley of the thrasher, the standard G' is secured to the thrasher-frame with the pulleys arranged vertically, as shown in Fig. 3, the driving-roller being changed in its bearings, so that the pul-

ley *d* is again at the inside of the carrier, and admits the stretching of a longer belt from the pulley *b* over the vertical pulleys *b'*, and then at a right angle to the pulley *d* of the carrier and back again, in similar manner as in the former position.

The carrier may thus, by merely changing the position of the different supporting and transmitting parts, be readily worked as required in connection with the thrasher, and thereby a time-saving and effective device for storing the straw obtained.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the thrashing-machine frame A, provided at the rear end with brackets *e e*, with the detachable stacker-frame B, detachable pulley-support G, detachable base-piece C^2, carrying the driving-pulleys C^1 of the stacker, and the detachable braces h^1 h^2, all combined substantially in the manner set forth, for detaching and changing the direction of the stacker.

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Witnesses:
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