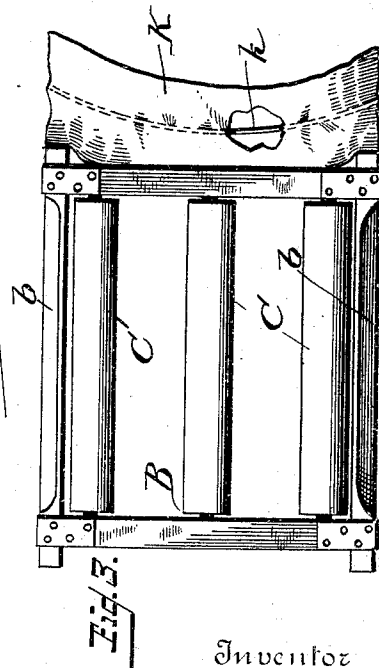


L. D. WELLS.
STRAW STACKER.

Patented Sept. 13, 1892.



"Amos A. Leiden,"
Van Buren Kilgard.

Lorenzo Dow Wells,

By his Attorneys *R. S. & A. P. Lacey*

UNITED STATES PATENT OFFICE.

LORENZO DOW WELLS, OF MORRISONVILLE, ILLINOIS.

STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 482,513, dated September 13, 1892.

Application filed February 4, 1892. Serial No. 420,308. (No model.)

To all whom it may concern:

Be it known that I, LORENZO DOW WELLS, a citizen of the United States, residing at Morrisonville, in the county of Christian and State of Illinois, have invented certain new and useful Improvements in Straw-Stackers; 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 appertains to make and use the same.

This invention relates to straw-stackers and aims to dispense with the wide side-boards usually employed to prevent straw and chaff from blowing out of the stacker and provide an attachment to effect the same result which will be light, simple, efficient, and admit access to the contiguous ends of the carriers being readily had.

The improvement consists of the novel features and the peculiar construction and combination of the parts, which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a perspective view of a portion of a stacker, parts being broken away, showing the application of the invention. Fig. 2 is a detail view of the lower or inner end of the main stacker, showing the bow and the operating parts in connection therewith. Fig. 3 is a detail view of the upper or outer end of the stacker or carrier which is attached to the separator, showing the roller-frame on which the inner end of the bow works.

The drawings represent the contiguous ends of two carriers of ordinary construction and relative arrangement as applied to a separator of any well-known pattern.

The invention consists in the attachment between the ends of the said carriers.

The carrier A, attached directly to the separator, is provided at its outer or upper end, on the under side, with a pendent frame B, having a series of rollers C, journaled therein and extending lengthwise with the said carrier A. The traveling belt *a* of the carrier A passes between the roller-frame B and the under side of the frame of the said carrier A. The corners of the side bars of frame B are chamfered or cut away between the ends of the said frame, as shown at *b*, to permit the free workings of

the bow D when turning the main stacker or carrier E to the right or the left. The main stacker or carrier E is pivotally supported between the vertical members of the yoke F, which has its vertical stem connected with the separator-frame in such a manner that the said yoke can be readily turned to move the outer end of the main stacker E to the right or the left, as required. The said stacker E can also be turned on its pivotal connection with the yoke to raise or lower its outer end in the usual manner and by any well-known means. The bow D is pivotally supported at the center of its closed end on the bar G, which is journaled at its ends in castings *g* at the sides of the stacker-frame E, and its outer end is supported by the spring-arms H, which are secured at their lower ends to the stacker-frame E and have their upper ends passed through eyes *i* on the castings I, that are secured to the bow D. The lower ends of the spring-arms I are coiled to permit them to adapt themselves to the various movements of the bow D and the stacker E. The motion of bar G on its journals permits the bow to tilt vertically to adapt itself to the relative positions of the carriers A and E and at the same time remain close up against the roller-frame at its rear end. The pivotal connection between the bow and the bar permits the bow to tilt laterally. Obviously when the stacker E is turned laterally the distance between the bow and the top edge of the side of the stacker carried beneath the carrier A will be diminished, and to allow for the changed relation of the parts and still preserve the bow in engagement with the roller-frame the said bow will tilt laterally. This feature is illustrated in Fig. 1. The spring-arm on the depressed side of the bow will be compressed and the other spring-arm will support the opposite side of the bow in an elevated position, as shown most clearly in Fig. 1. The flexible guard J, of canvas or ducking, is secured at its upper edge to the bow D and at its lower edge to the frame of the stacker E and prevents the wind from blowing away the chaff and the straw. The inner end of the bow presses against the rollers, which latter relieve the friction incident to the shifting of the bow when turning the stacker to either the right or the left. The

apron K, depending from the end of the carrier A and extending within the guard J, assists the latter in retaining the straw and chaff. This apron is stiffened by the wire
5 bow *k*, which conforms to the inner or closed end of the bow D.

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

10 1. The combination, with the carriers A and E, of the bow D, having pivotal connection with the carrier E and adapted to tilt vertically and laterally, a flexible guard depending from and supported by the bow, and
15 spring-arms for yieldingly supporting the outer ends of the said bow, substantially as and for the purpose described.

2. The combination, with the carriers A and E and the roller-frame B, pendent from the
20 frame of the carrier A, of the bow D, having pivotal connection with the carrier E and adapted to tilt vertically and laterally and held in engagement with the said roller-frame, a flexible guard depending from and sup-
25 ported by the bow, and spring-arms for yieldingly supporting the outer ends of the said bow, substantially as and for the purpose described.

3. The combination, with the carriers A and E, of the bow D, having pivotal connection
30 with the carrier E and adapted to tilt vertically and laterally, a flexible guard depending from and supported by the bow, and spring-arms for yieldingly supporting the
35 outer ends of the said bow, and an apron depending from the carrier A and extending within the said guard, substantially as and for the purpose described.

4. The combination, with the carriers A and E, the carrier E being adapted to tilt verti-
40 cally and laterally, and the roller-frame B, pendent from the carrier A, of the bar G, journaled at its ends on the carrier E, the bow D, pivotally connected with the bar G, spring-
45 arms H for supporting the bow D, the flexible guard J, depending from and supported by the bow D, and the apron K, stiffened by bow *k*, depending from carrier A, substantially as described.

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

LORENZO DOW WELLS.

Witnesses:

ANDREW W. MILLER,
J. L. TERRELL.