

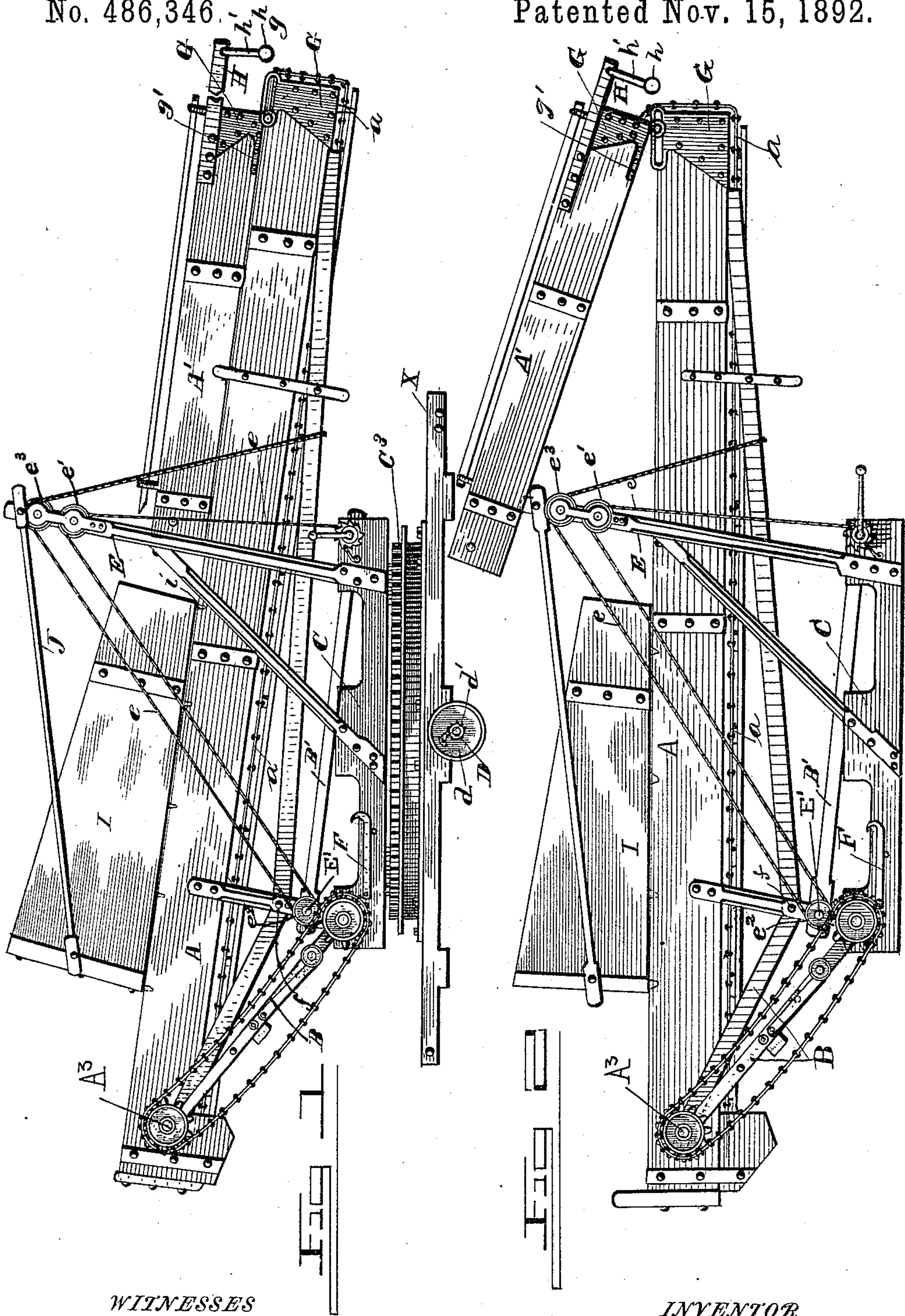
(Model.)

2 Sheets—Sheet 1.

A. LAMMEDEE.
STRAW STACKING MACHINE.

No. 486,346.

Patented Nov. 15, 1892.



WITNESSES

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Arthur E. Fowell

INVENTOR

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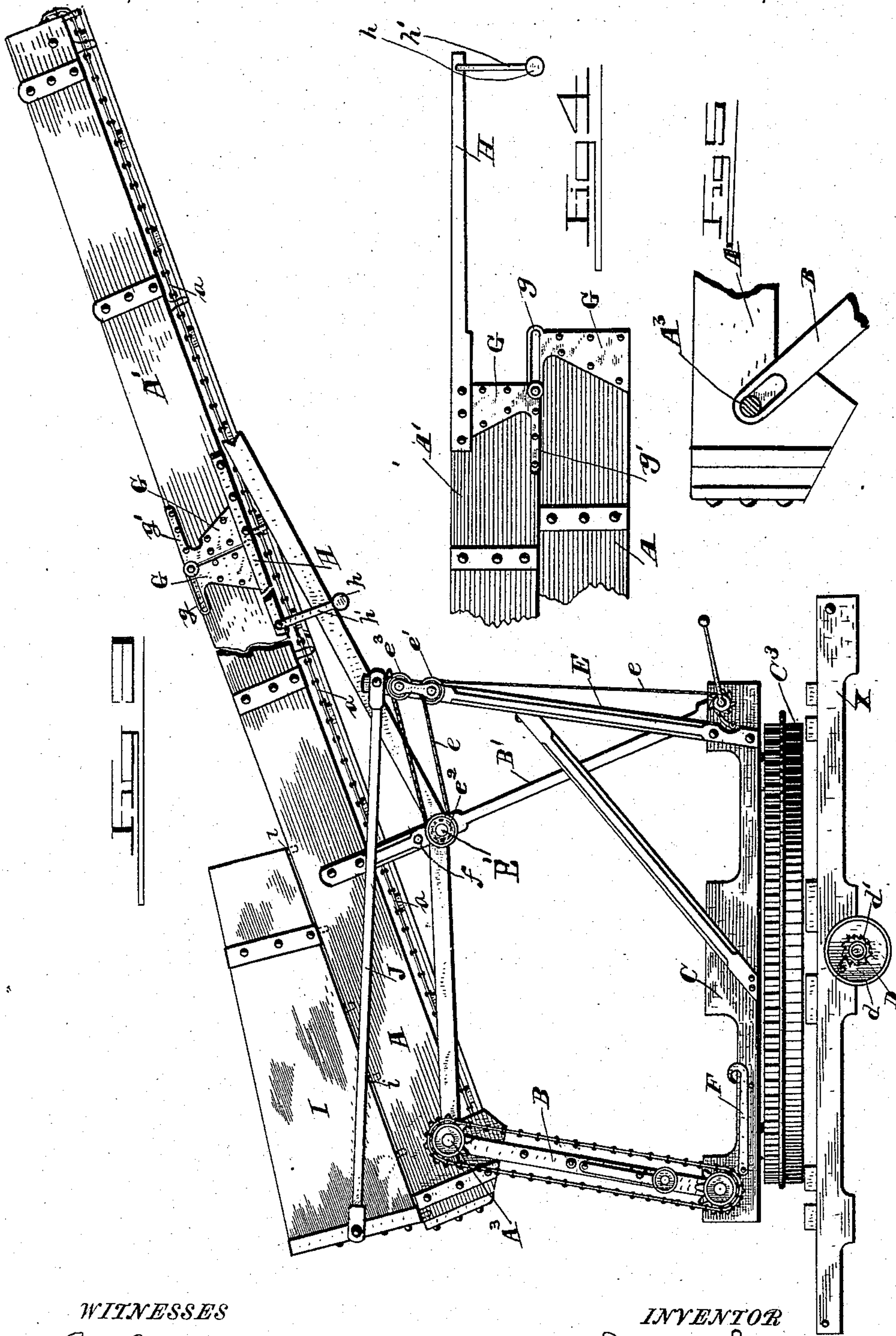
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UNITED STATES PATENT OFFICE.

AUGUST LAMMEDEE, OF SOUTH BEND, INDIANA.

STRAW-STACKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 486,346, dated November 15, 1892.

Application filed July 1, 1891. Renewed October 11, 1892. Serial No. 448,503. (Model.)

To all whom it may concern:

Be it known that I, AUGUST LAMMEDEE, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Straw-Stacking Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a detail side elevation of the carrier-sections, receiver-section, and their connections and operating devices folded. Fig. 2 is a similar view of the same partly extended; Fig. 3, a similar view wholly extended. Figs. 4 and 5 are details.

This invention relates to straw-stacking machines, and is an improvement upon the stackers shown and described in my Letters Patent No. 385,634, of July 3, 1888, and No. 430,863, of June 24, 1890; and it consists in the novel construction and combination of parts hereinafter described and claimed.

Reference being had to the drawings by letter, A designates the lower section of the carrier, which is mounted upon front and rear pivoted legs or hinge-bars B B', which are in turn pivoted to a rotatable or oscillating carriage C, mounted on annular bearing-rings C³, the lowest one of which is fixed on a supporting-frame X. The carrier-belt in the lower section is driven by belting and pulleys from the main shaft D, which also operates the carriage. The sections can be oscillated or elevated by means of a rope or chain e, the ends of which are attached to drums on a transverse shaft on carriage C and run thence up over pulleys e', journaled in the upper ends of uprights E, attached to the carriage, thence down under pulleys e² on the ends of a shaft E', connecting bars B' to the lower section, thence up over pulleys e³, mounted in uprights E above the pulleys e', then passing down under the lower section, as indicated in the drawings. All the aforesaid parts are constructed and operated substantially as in my patents above referred to.

The driving-pulley d on shaft D is provided with a clutch d', which will only engage the shaft D during the forward rotation of the pulley, so that if the motive power should be

reversed the stacker will not be set in motion. The front and rear bars B and B' being of unequal length, when ropes e are tightened the sections are raised and simultaneously thrown forward, describing an arc-shaped path, the rear end of the carrier rising faster than its front or receiving end. In order to prevent this double movement, yet allow the rear end of the carrier to be elevated, if desired, I employ hooks F, pivoted to the side of the carriage, and which can be engaged with pins f on the sides of section A, near pulleys e², or with the ends of the shafts of said pulleys. These hooks will hold down section A and cause it to oscillate on shaft E' as a center when ropes e are tightened, as the ropes will lift the rear end of section A toward pulleys e' e³, thereby raising the delivery end and slightly depressing the receiving end of the carrier, and it is therefore necessary to make the connection at one end of bars B loose to permit this movement. I prefer to slot or loop the upper ends of bars B, as indicated in Fig. 5.

The driving-shaft A³ of the carrier-belt in the section passes through these slots or loops, and when hooks F are disengaged the weight of the delivery end of the section will normally hold the shaft in the upper ends of the slots.

When hooks F are disengaged, the rope e, when tightened, draws pulley e² toward pulleys e' e³, lifting the carrier in the manner described. These hooks are useful when the stacker is employed with clover-hullers or low thrashers, as the receiving end of carrier is then held down and neither drawn away from the discharge end of such machines or raised above the same.

A' designates the upper section of the carrier, hinged at its lower end to the upper end of carrier-section A and adapted to be turned over on section A during transportation. The sections are connected by hinges G and the part g of the hinge connected to section A has an elongated slot in its upper end, in which plays a stud on the part g' of the hinge connected to section A'. By this hinge when section A' is turned over upon section A it can move longitudinally in over the latter sufficient to prevent the under side of the endless carrier-belt a, which runs over both sections,

being strained at the bend when the sections are folded, thus enabling me to shorten the carrier-belt so that there will be little or no slack therein when the sections are extended.

5 To the hinged ends of section A' is attached projecting arms H H, which are connected at their free extremities by links h' to a rod h. By grasping this rod and pulling down thereon the upper section A' can be folded or extended, as is obvious, and when extended the rod h, underlying section A, serves to brace and sustain the upper section, as will be apparent from the drawings.

10 I designates the receiver or hopper, which is of ordinary form, but rests and moves upon the sides of section A, being provided with fingers i i, which prevent it slipping laterally off the section. The receiver is held in position longitudinally of the section by rods J J, which are pivoted to the receiver and to the upper ends of uprights E E. By reference to the several figures it will be observed that these rods cause the receiver to keep almost in the same vertical position above the carriage, causing it to shift its position on the lower section or allowing the lower section to shift thereunder as it rises and moves forward. By this means the receiver is always in position beneath the delivery-trough of the thrasher, &c., so that the straw is properly delivered thereto, whereas when the receiver has been fixed to the carrier-section it shifts horizontally as well as vertically and the machine has to be shifted as the stack rises or the straw is not properly and cleanly received by the stacker.

These several improvements and their utility having been now described, what I claim as new is—

40 1. The combination of a carrier and means for moving the same both vertically and longitudinally, with a receiver slidably supported on the lower end and guided by the sides of the carrier, and the rods pivotally connected to the receiver and to a fixed upright separate from and beside the carrier, whereby the receiver is permitted to move only in a substantially-vertical plane, substantially as described.

50 2. The combination, in a folding carrier, of a section having hinge-plates g, having elongated slots in their upper edges, substantially

as described, attached to the ends of its sides, with a folding section having hinge-plates g', having studs on their upper inner corners, substantially as described, attached to the ends of its sides, the studs of plates g' engaging the slots of plates g, forming a slidable hinge-joint between the sections, substantially as specified. 55 60

3. The combination of the carriage, the carrier mounted thereon, and means, substantially as described, for adjusting and supporting the same, with the hooks attached to the carriage adapted to engage and hold down the carrier but permit its oscillation, substantially as and for the purpose described. 65

4. The combination of the carrier-section, the front and rear bars supporting the same, said front bars having a loose connection, and means for elevating the carrier, with devices for holding down the rear end of the section but permitting it to oscillate, substantially as and for the purpose specified. 70

5. In a folding carrier, the combination of a lower section and an upper section hinged thereto with the arms attached to the hinged end of the upper section and the rod connected to the extremities of said arms and adapted to engage the fixed section, substantially as and for the purpose specified. 75 80

6. In a straw-stacker, the combination of a vertically and longitudinally adjustable carrier and means, substantially as described, for adjusting the same, with the hooks F and pins f, substantially as and for the purpose set forth. 85

7. The combination of the adjustable section A, the folding section A', the hinge-joints uniting the sections, the receiver I, slidably mounted on section A, and the rods J, pivotally connected to said receiver and to fixed support beside but independent of the section, substantially as described, and mechanism for adjusting said sections, all constructed and arranged to operate substantially as described. 90 95

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

AUGUST LAMMEDEE.

Witnesses:

JAMES DUSHANE,
WILLIS A. BUGBEE.