C. AINSWORTH.

Elevator for Harvesters.

No. 212,879. Patented Mar. 4, 1879.

Fig. 1

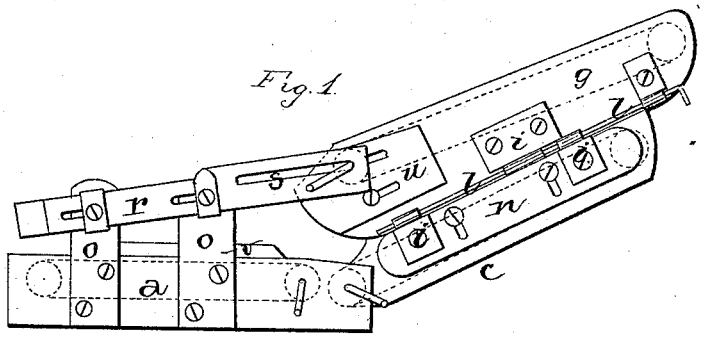
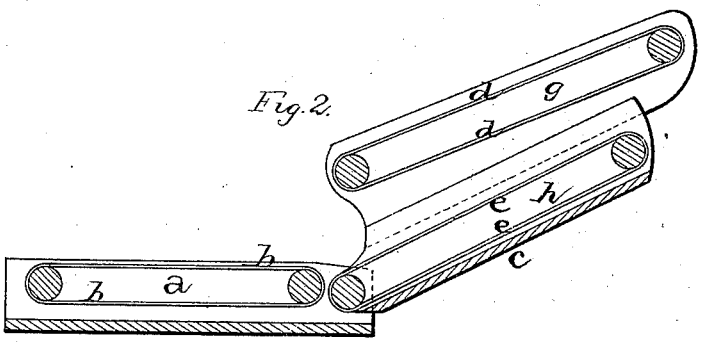


Fig. 2.



Witnesses:

J. W. Garner

H. S. D. Haines

Inventor:

C. Ainsworth,

per

F. A. Lehmann, atty

UNITED STATES PATENT OFFICE.

CLARK AINSWORTH, OF MONTICELLO, IOWA.

IMPROVEMENT IN ELEVATORS FOR HARVESTERS.

Specification forming part of Letters Patent No. **212,879**, dated March 4, 1879; application filed January 27, 1879.

To all whom it may concern:

Be it known that I, CLARK AINSWORTH, of Monticello, in the county of Jones and State of Iowa, have invented certain new and useful Improvements in Harvester-Elevators; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in elevators for harvesters; and it consists in the combination and arrangement of parts, that will be more fully described hereinafter, whereby the elevator is made adjustable.

Figure 1 is a side elevation of my invention. Fig. 2 is a vertical section of the same.

To the front edge of the box-like frame *a* is to be secured the cutter-bar and sickle, and in the box is placed the endless apron *b*, which receives the cut grain and moves it down to the elevator-frame *c*. This elevator is hinged inside of the frame *a*, and is provided with an upper apron, *d*, and a lower one, *e*, in the usual manner.

This elevator-frame, instead of being in one piece, is here made in two separate and distinct parts, the upper one, *g*, having the apron *d* in it, and the lower one, *h*, the apron *e*. Each of the sections *g h* is provided with a half-hinge, *i*, and through the eyes of these hinges is passed the rod *l*, which not only connects the two parts together, but serves as a guide for the upper section to move outward upon as the elevator is raised upward. The hinges of the lower section, instead of being fastened directly to it, are secured to the slotted strips *n*. By slotting the strips it is made possible to adjust them up or down, and thus draw the two sections *g h* nearer together or move them farther apart, and by this means to regulate the distance between the two aprons *d* and *e*.

By making the elevator *c* in two sections and uniting them together, as here shown, it will be seen that the upper section has two movements—one a sliding movement on the rods *l*, and the other an up and down adjustment.

Rising from the rear edge of the box-like frame are the two slotted standards *o*, and in their upper ends is fastened the slotted bar *r*, the slots in the bar running at right angles to those in the two standards. Through the inner end of the bar is made a long slot, *s*, through which passes one end of the journal of the lower roller of the upper apron. As the elevator-frame is raised upward this journal catches against the edges of the slot, and forces the upper section, *g*, upward and outward, and thus prevents the lower roller of the upper apron from moving so near to the roller of the apron *b* as to close up the opening between the rollers of the two aprons *d* and *e*, and thus prevent the free passage of the grain between them. By thus having the slot to cause the upper section of the elevator-frame to move outward as the frame is moved upward, the frame can be raised upward until the inner end of the upper section strikes against the stops *v* without the relative positions of the three inner rollers of the aprons being changed sufficiently to make any difference in the size of the throat.

In order to regulate the distance between the lower roller of the upper apron and the bed-apron, there is a slotted slide, *u*, fastened to the side of the upper section, which, when moved so as to project beyond the end of the section, strikes against the top of the bed and prevents the frame *c* from rising too high. If desired, this slotted slide may be fastened to both the upper section and the bed-frame *a*.

Having thus described my invention, I claim—

1. The elevator-frame *c*, made in two sections, which are united together by means of the rod *l*, which rod serves also as a guide for the upper section to move upon, substantially as set forth.

2. The elevator-frame *c*, made in two sections, the upper one being provided with the slotted slide *u*, substantially as specified.

3. The combination of the frame *a*, slotted standards *o*, slotted bar *r*, and the elevator-frame, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of January, 1879.

CLARK AINSWORTH.

Witnesses:
H. W. GILL,
A. MATTHIESSEN.