

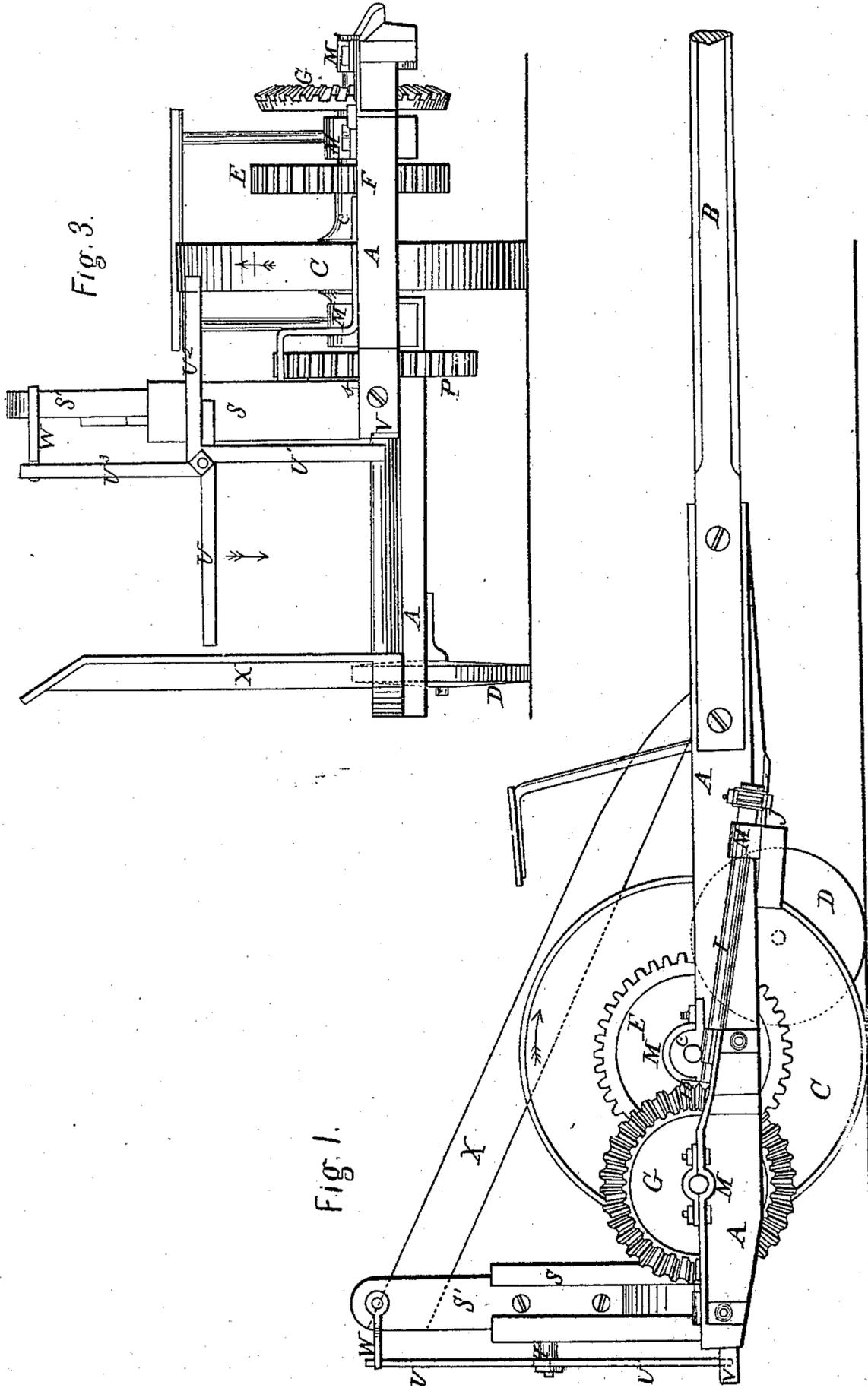
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2 Sheets—Sheet 1.

W. LAPHAM.  
Executor of S. LAPHAM, Deceased.  
MAIZE HARVESTER.

No. 10,811.

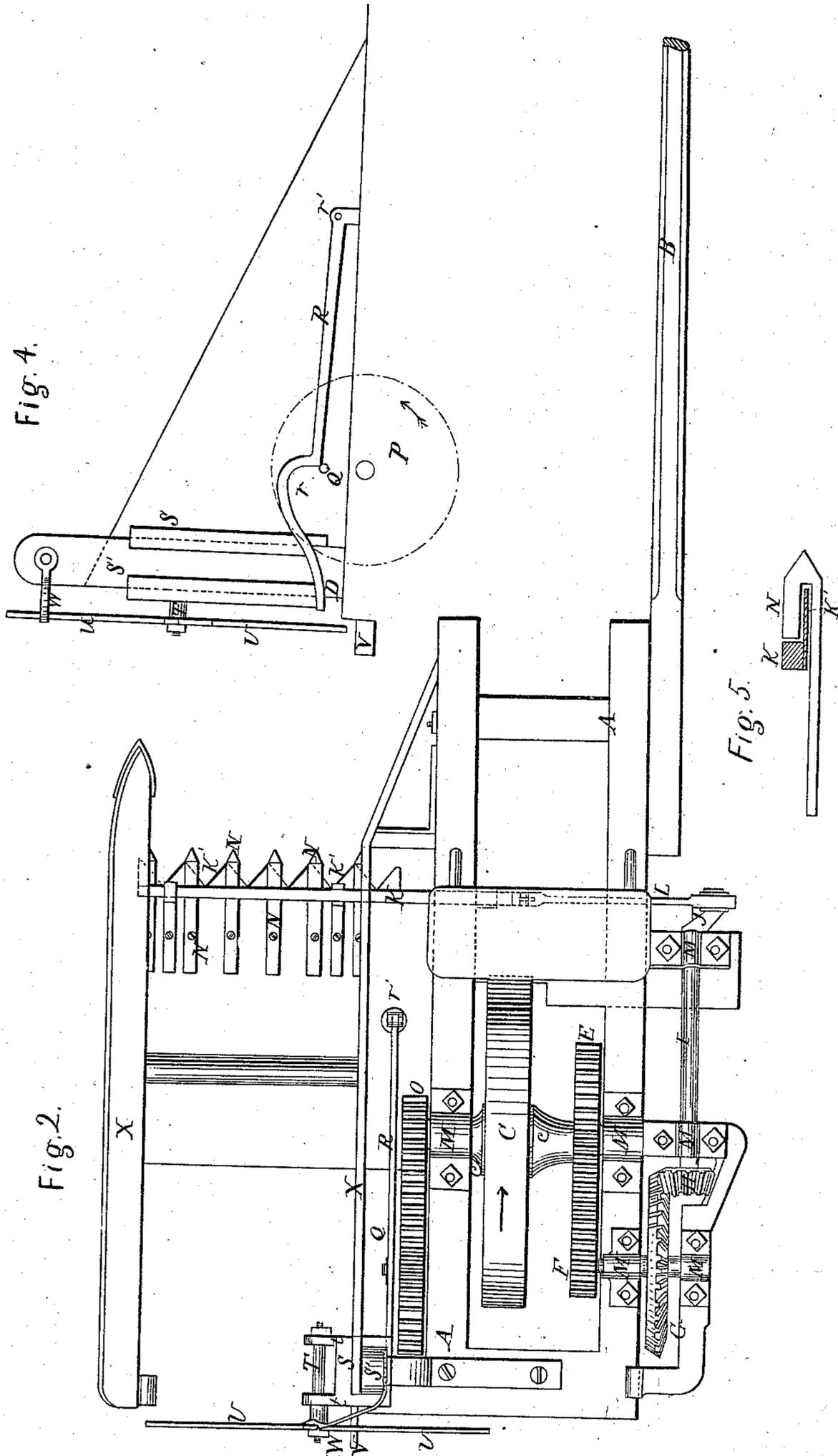
Patented Apr. 18, 1854.



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# UNITED STATES PATENT OFFICE.

SENECA LAPHAM, OF SALEM, OHIO; WM. LAPHAM, EXECUTOR OF SAID LAPHAM, DECEASED.

## IMPROVEMENT IN MAIZE-HARVESTERS.

Specification forming part of Letters Patent No. 10,811, dated April 18, 1854.

*To all whom it may concern:*

Be it known that I, SENECA LAPHAM, of Salem, Champaign county, State of Ohio, have invented a new and useful Improvement in a Machine for Cutting Corn; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 in the drawings is a side elevation of my improved machine; Fig. 2, a plan view, and Fig. 3 the back end view. Figs. 4 and 5 are detached sections, which will be referred to in description.

Like letters refer to like parts in the different views.

A A represents the frame-work of the machine; B, Figs. 1 and 2, the shaft or tongue to which the team is attached for operating the machine; C, the driving-wheel, which operates the machine, and which, in connection with the wheel D, Figs. 1 and 3, sustains the machine.

On the shaft C, to which the driving-wheel is attached, is keyed the spur-wheel E, which meshes into the pinion F. On the same shaft as the pinion F is secured the bevel-gear G, which is in gear with the bevel-pinion H. This pinion is attached to the shaft I, Figs. 1 and 2, which shaft is provided with the crank J, Fig. 2. The knife-shank K is connected to the crank J by the connecting-rod L.

The attachments of the rod L to the crank J and shank K are by means of a wrist and strap-joint in the usual manner.

M are boxes in which the shafts before described revolve.

As the machine traverses in the proper direction, the driving-wheel G revolves in the direction of the arrow, and a reciprocating motion is conveyed to the knives or cutters K' by means of the connection formed between the wheel C and the knives K', as before described. The knives K' work in a slot in the fingers N, as seen in Fig. 5. The fingers are screwed to the platform, as seen in Fig. 2. As the machine is brought into practical operation, the cornstalks are cut off by being brought in contact with the acting knives, and deposited on the ground in gavels for binding.

Having described the combination and arrangement for cutting the stalks, and which may be applied to the purpose of cutting other

grains and grass, I will proceed to explain the operation of depositing the cut stalks in gavels for binding.

On the shaft C is secured the pinion O, which meshes into the gear P, Figs. 2, 3, and 4. In the gear P is inserted the pin Q, which pin at every revolution of the gear P in the direction of the arrow raises the lever R, which drops as soon as the pin enters the curve *r*. The back end of the lever is attached to the frame by a pin-joint at *r*, and the slide S is in contact with the other end, as seen at *s*, Fig. 4. This slide moves up and down upon the slide-standard S'. To the slide is secured the shaft T by the bearings *t t*. The revolving arms U U' U<sup>2</sup> U<sup>3</sup> are attached to the shaft T. As fast as the corn is cut by the machine it falls upon the arm U, where it is supported until the lever R is raised by the pin Q, which lever raises the slide S and arms together. The arms are prevented from turning only when discharging gavels by the catch V and spring W; but as soon as the arm is raised above the catch, as seen in Fig. 4, the arms revolve in the direction of the arrow by the weight of the stalks on the arm U, which drops the corn successively at every revolution of the gear P in gavels. As soon as the arm U' has passed the catch the slide S is allowed to drop again in place by the curve *r* of the lever, which brings the arm U to the catch, and the arm U<sup>2</sup> to U, and the arm U<sup>3</sup> to the spring W. By this mechanical arrangement it will be noticed, when the machine is in practical operation, that as the corn or other grain or grass is cut it falls upon one of the arms which revolve, and is deposited in gavels at regular intervals.

X X represent side pieces to keep the corn in place.

I do not claim the device for cutting the stalks.

What I claim as my invention is—

The method of arranging and operating the reel—that is, hanging the reel on a frame working vertically in ways and supplied with suitable stops for receiving and discharging at intervals the cut maize—substantially as set forth.

SENECA LAPHAM.

Witnesses:

JOHN PHILIPS,  
JER. FERSON.