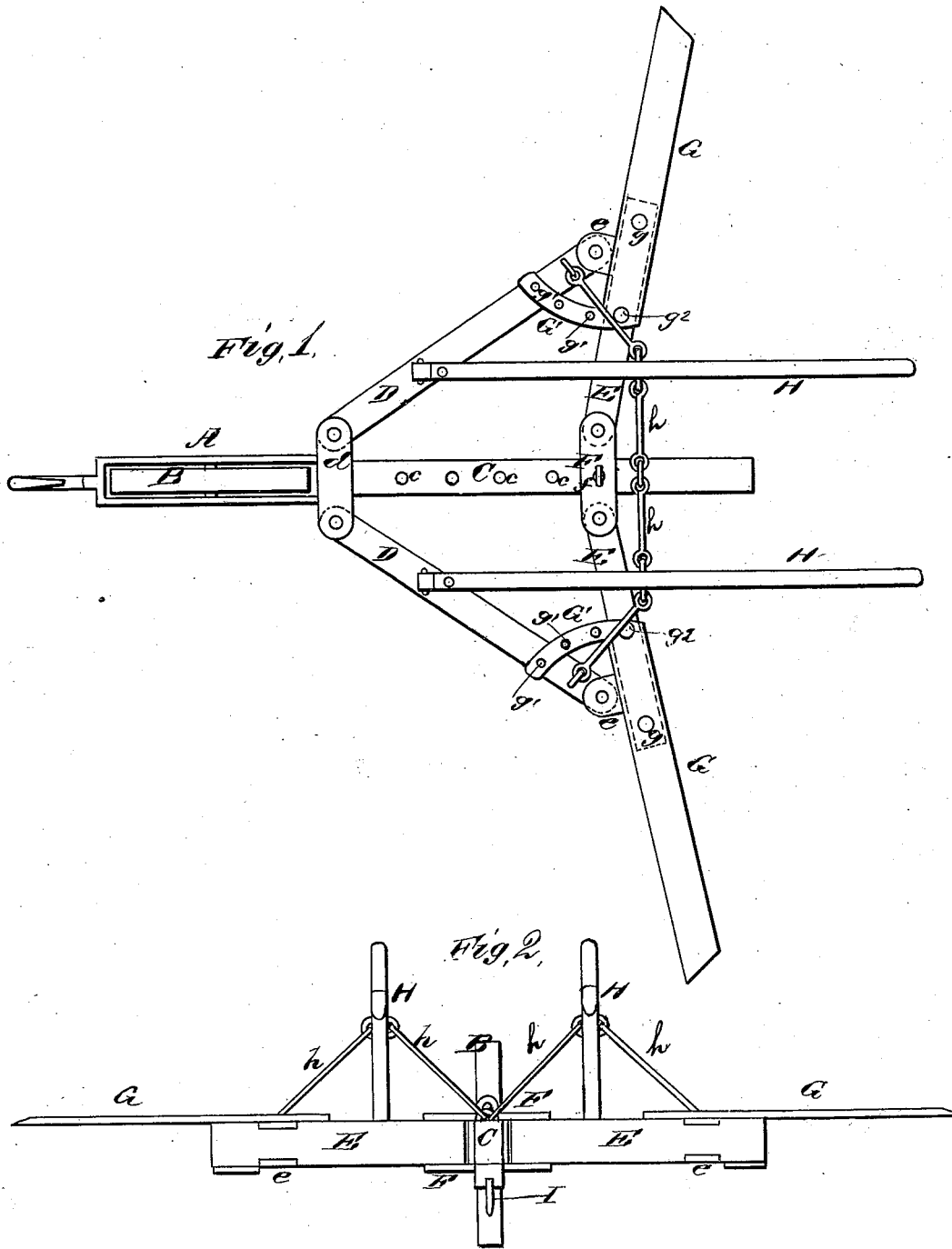


W. GANS.
CORN-STALK CUTTER.

No. 187,371.

Patented Feb. 13, 1877.



WITNESSES
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UNITED STATES PATENT OFFICE.

WILLIAM GANS, OF OLATHE, KANSAS.

IMPROVEMENT IN CORN-STALK CUTTERS.

Specification forming part of Letters Patent No. 187,371, dated February 13, 1877; application filed July 22, 1876.

To all whom it may concern :

Be it known that I, WILLIAM GANS, of Olathe, in the county of Johnson and State of Kansas, have invented a new and valuable Improvement in Corn and Stalk Cutters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my corn and stalk cutter. Fig. 2 is a rear view of the same.

This invention relates to devices for cutting the stalks of growing corn; and it consists in means for adjusting the pivoted arms that carry the blades, so as to adapt the cutter to rows of different widths; also, in means for adjusting the inclination of the blades relatively to such arms, so that the cutting-edges may be properly presented to the stalks; also, in auxiliary devices, hereinafter particularly described.

In the annexed drawings, A designates a metal draft-tongue, slotted to receive a front wheel or roller, B, and rigidly attached to the end of beam C. D D are hinged arms, pivoted at one end between plates *d d* fixed to beam C, and at the other end to plates or lugs *e e* on hinged knife-bearing arms E, which are similarly connected to the sides of a metal slide or sleeve, F, that slips backward and forward over beam C. When said slide is drawn or pressed forward, arms D D and E E are brought closer to beam C, so that knives G G, carried by arms E E, will be adapted to cut only rows that are comparatively near each other. Moving the slide backward produces an opposite result, enabling the knives to cut where the rows are farther apart.

The arms D and E are locked in any position desired by means of perforations *e e* in beam C, and perforation *f* in slide F, which registers therewith. A pin or bolt is to be passed through perforations *f* and *e*, securely fastening the parts.

H H are handles connected to arms D D by double hinges, which allow both lateral and vertical vibration, whereby said handles accommodate themselves to the movements of

the rest of the apparatus, and maintain the same position relative thereto, whether arms D D and E E are expanded or drawn together. Said handles are also connected to the rear ends of arms D D, and to beam C, by hinged bars or long links *h h*.

By the devices above described, the angle of presentation of the knives to the corn would necessarily be made to vary with the distance between the rows, so that they would sometimes cut almost at right angles, sometimes very obliquely.

To obviate this difficulty and insure a good cut, I pivot knives G G to arms E E, at *g g*, and provide them with rigid rear segmental plates G' G', which are perforated at *g¹ g¹*, so that each of them presents a series of holes which register with a similar perforation or recess, *g²*, in the arm E, which carries said plate and its knife. A pin or bolt is employed to pass through any one of perforations *g¹* and perforation *g²*, locking the knife at any point of its semicircular adjustment.

On the under side of beam C, at the end thereof, I attach a guide-blade, I, which serves to keep the course of the apparatus straight.

It may also be employed as a marker for land that is to be plowed.

The above-described mechanism may be set upon wheels and axle, and provided with a seat for the convenience of the operator. It may also be furnished with a lever adapted to move sliding sleeve F backward or forward. But the front part of the cutting-frame must be elevated considerably above the rear part to enable the knives G to cut the stalks properly. This I accomplish by making the front wheel B sufficiently large, and journaling it in the sides of the slotted draft-bar.

The adjustment of the knives on the arms E may be employed without the adjustment of said arms relative to the beams, said arms being rigid thereon. But I prefer the combination and arrangement shown.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a corn-stalk cutter, the combination of devices for adjusting the blades to or from one another, with devices for adjusting the inclination of said blades relatively to the

arms which carry them, substantially as set forth.

2. The combination of arm E, having perforation or recess g^2 , with knife G pivoted thereon, and segmental adjusting-plate G' perforated at g^1 g^1 , substantially as set forth.

In testimony that I claim the above I have

hereunto subscribed my name in the presence of two witnesses.

WILLIAM GANS.

Witnesses:

B. F. ALLEN,

JOHN T. LITTLE.