W. N. ROWE.

CORN HUSKER.

No. 22,894. Patented Feb. 8, 1859.

Fig. 2.

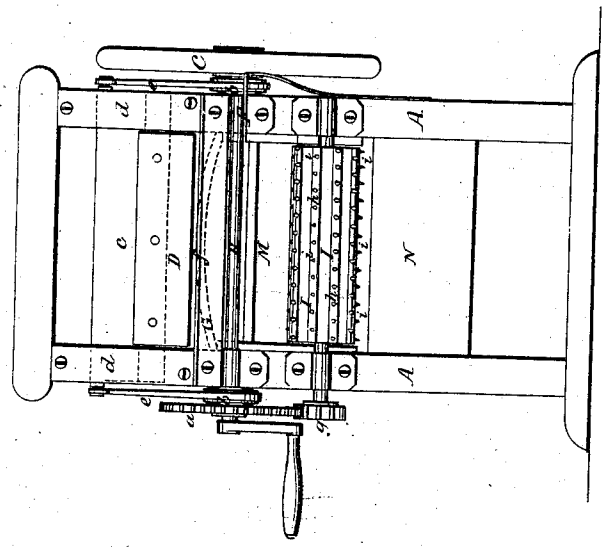
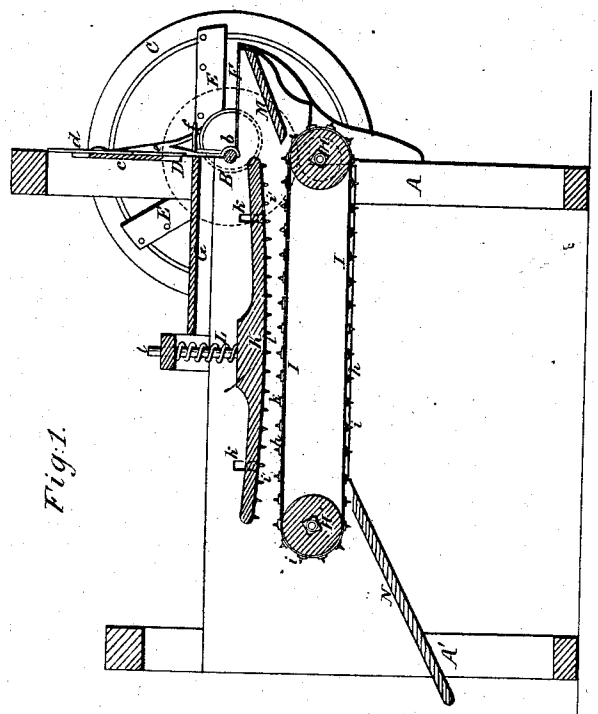


Fig. 1.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM N. ROWE, OF SHARPSBURG, MARYLAND.

CORN-HUSKER.

Specification of Letters Patent No. 22,894, dated February 8, 1859.

To all whom it may concern:

Be it known that I, WM. N. ROWE, of Sharpsburg, in the county of Washington and State of Maryland, have invented a new and useful Machine for Husking Corn; and I do hereby declare the following to be a full and exact description thereof.

The nature of my invention consists in so arranging the parts of my machine as that ears of corn in the husk, when presented to it, may have their butt or stalk ends cut off, and then be received within it, stripped of their husks, and be discharged clean at the rear end in the manner hereinafter described.

In the accompanying drawings Figure 1 is a longitudinal section of the machine, and Fig. 2, an elevation of the end at which the corn to be husked is fed.

A A are the uprights or standards supporting the front end of the machine, and A′ are those of the rear end of the same. Supported against, and extending across from one to the other of the standards A, A, is a shaft B, carrying at one end a spur gear *a*, and at the other end, the fly-wheel C. This shaft has also at each of its ends an eccentric *b* which give reciprocating vertical motion to the knife D and its supporting plate *c* in the guides *d*, by means of the connecting rods *e*. To the arms of the fly-wheel C, are also affixed knives E, in a manner common to many straw cutters, the edges of which are made to shear close to a platform F, extending out in front of that standard A which is adjacent to the fly-wheel. The knife D, is made to shear against the platform or rest *f* and to pass down between it and the shield G; just sufficient space being left between the two for the passage of the knife.

The object of the shield G, is to shed to either side of the machine, and thus prevent from falling into it, the butts of the ears as they are cut off; to this end it is either formed of two plane surfaces meeting at an angle like the roof of a house, or it may be curved, as shown in dotted lines in Fig. 2.

The spur gear *a*, on the shaft B, meshes into and gives motion to the pinion *g*. The relative position of these two is shown in dotted lines in Fig. 1. On the same shaft with the pinion *g*, and revolving with it, is a roller H, which gives motion to a broad band or endless apron I, passing around another roller H′, near the rear end of the machine. Upon and across the band I, are secured metallic bars or plates *h* bearing teeth or pins *i*, arranged so that the pins in one plate shall be opposite the spaces between the pins in the next adjacent plates. This is shown in Fig. 2.

Over the endless apron I, of the same width with it, and extending the whole distance between the centers of the rollers H, H′, is a plate K, armed with teeth, or pins *i′* on its under face in the same manner as the endless apron I, except that the pins *i′* are placed directly in the plate K, without the interposition of such bars or plates *h* as are on the band I. The under surface of the plate K is made slightly convex toward the band I, so that the space between the two is less in the center of their lengths, than at the ends. This is for the purpose of insuring action of the teeth or pins if the band or apron should sag down between the rollers. The space between the points of the teeth *i* and *i′* is sufficient at the ends of the plate K, to just allow an ear of corn in the husk to crowd in between them. If the space between the band I, and the plate K should prove too narrow, the ear of corn will force the plate K up against the springs L—of which there are two—one on each side of the center of the plate K—until the resistance becomes less, when the springs will force the plate K, down to its bearings again. Pins in the edges of the plate K, work in the slots *k* in the sides of the machine, and, with the guide rods *l*, surrounded by the springs L, prevent the plate K from being moved laterally out of its proper position over the band I.

An inclined plane M, extending across the whole width of the band I, serves as a guide bed or hopper to introduce the ear to the teeth *i* and *i′*; and a similar inclined plane N, receives the corn and husks as they are discharged and conveys them beyond the rear end of the machine.

In a very wide machine it is evident that one person could not cause to be cut and fed as many ears of corn as could be husked. I have therefore represented the knife D as extending across the whole width of the machine, so that a number of persons may be engaged in cutting and feeding. In a narrow machine, at which only one person can operate, either the knife D may be dispensed with, or the knives E on the arms of the fly-wheel.

The operation of this machine is as follows: Motion being communicated by means of a crank or otherwise, the knives, D, by means of the eccentrics *b* and connecting rods *e*, and the knives E on the fly-wheel, both, or either of them singly, are caused to cut off the butts of the ears presented thereto by the attendants, who immediately feed them sidewise to the band or apron I, whereupon they are taken and carried by and between the teeth *i* on said band and the teeth *i'* on the under side of the plate K, and completely denuded of their husks and with them discharged out over the inclined plane N. The husks being now in good condition for being cut into feed, or turned to account for any of the various purposes for which they can be used.

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

The combination of the adjustable plate K armed with spikes, *i*, with the endless apron I, and knives D, and E, when these several parts are constructed, arranged, and operated, in the manner described for the purposes specified.

WM. N. ROWE.

Witnesses:
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