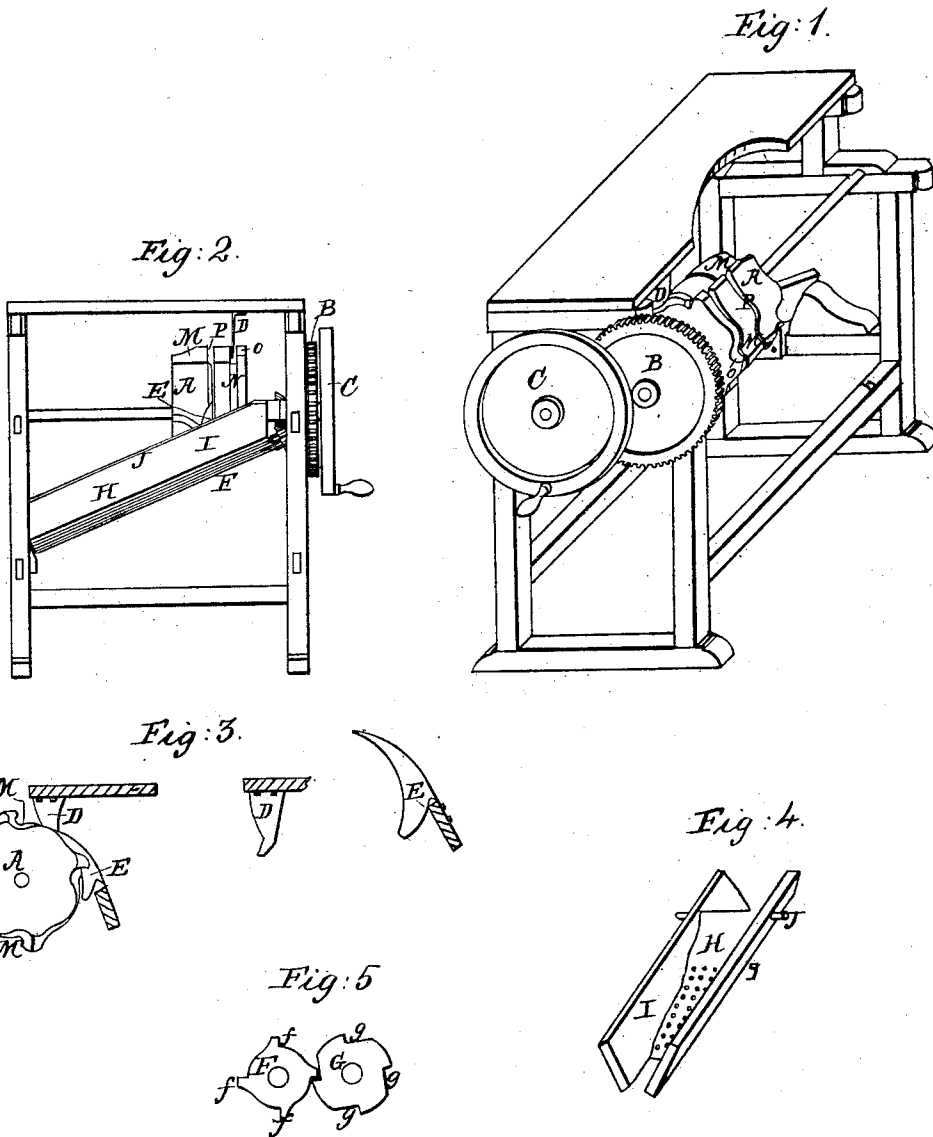


D. M. MEFFORD.

Corn Husker.

No. 18,922.

Patented Dec. 22, 1857.



UNITED STATES PATENT OFFICE.

DAVID M. MEFFORD, OF PERRYSBURG, OHIO.

CORN-HUSKER.

Specification of Letters Patent No. 18,922, dated December 22, 1857.

To all whom it may concern:

Be it known that I, DAVID M. MEFFORD, of Perrysburg, Wood county, Ohio, have invented new and useful Improvements in Machines for Husking Corn; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

The best husking machines hitherto known to me are necessitated to entirely sever the roots of the husk from the ear previous to stripping it and in order to accomplish this effectively, almost invariably slice off a portion of the base of the ear. This mutilation not only wastes the grains thus severed but eventuates in a tenfold greater waste from the chance shelling which takes place at every subsequent handling, in consequence of the loss of the support of the base grains.

My invention consists in an improved combination of devices to prepare the ear for the action of the husking rollers and also in the combination of a hinged and roughened apron with husking rollers of peculiar construction adapted to completely strip the husks from the ear, whether their roots have been severed or not.

In the accompanying drawings Figure 1 is a perspective view of the machine. Fig. 2 is a rear elevation of the same. Fig. 3 is an end view of the feed drum and its accessories. Fig. 4 is a perspective view of the lower part of the trough or chute and the hinged apron connected therewith. Fig. 5 is an end view of the husking rollers.

A, is a large cylinder or drum journaled horizontally. Encircling this drum near its left end is a groove N, adapted to receive the "root husks" (bractea) of the ear. The periphery of the drum to the right of the groove N is occupied by equidistant longitudinal troughs M, adapted to receive the unhusked ears, bear them forward to the slicing knife and discharge them into the chute I, as the drum continues to rotate.

o, are notches on the periphery of the drum, to the left of the groove N, arranged in a line with the troughs M, but sufficiently shallower to adapt them to receive the stalk or peduncle, their inner margins serving as a stop or gage for the shoulders or butts of the ears.

D, is a stationary knife attached to the frame and occupying the right side of the groove N. This knife is of such shape and

so arranged as to cut shearwise as the drum rotates, severing the peduncle from the ear without tending to throw the latter out of its trough or "pocket." Around the periphery of the drum to the right of and parallel with the groove N, is another groove P, the bottom of which is occupied by a husking peg E, of peculiar form and so arranged as to pierce and open the under part of the husk (as the ear is carried over it) without interfering with the grain.

F, G, are the husking rollers, the construction of which is exhibited in Fig. 5, one having longitudinal beads *f*, and the other corresponding depressions *g* in which the beads work. These rollers are geared together so as to cause them to rotate in conjunction in opposite directions.

H, is a sheet iron flap or apron hinged at top (J) to the chute I, at such a height as to admit of ears passing under it and afterwards confining them to the action of the rollers with an easy pressure, the under surface of the apron being roughened to prevent the too free passage of the ears and to assist the rollers in turning them.

The operation is as follows:—The machine being put in motion by means of the crank wheel C, and gearing (B, etc.) connected therewith, the operator stands facing the drum A, and as each trough M, comes up places in it an ear of corn, with the stem in the notch O, and the butt in contact with the shoulder of the groove N, which forms a gage to insure the correct presentation of the ear to the knife. As the drum continues to rotate the peduncle coming in contact with the knife D is severed at its junction with the ear, without the possibility of any grain being cut from the ear. At the same time the point of the husking peg E, penetrating the husk on the under side, separates a strip of the husk which is carried under the husking peg and falls beneath the drum, while the ear, raised out of its trough or pocket by passing over the elevated back of the husking peg, falls into the inclined chute I, where it is subjected to the action of the rollers, F, G, and apron H. The upper end of the apron H, is hinged at such height in the chute I, as to admit of the ears passing under it. It then adapts itself to the size of the ears, pressing lightly upon them and causing the beads *f*, upon the roller F, to turn the ears over and over so that they are acted upon by the rollers on

all sides, the husks being drawn off and carried between the rollers while the ears pass down the chute and escape at the end of the machine.

- 5 The described method of gaging the presentation of the ears to the knife is found effectually to prevent the separation of any grain with the penduncle and at the same time never leaves sufficient stem attached to the ear to interfere with the action of the husking rollers F, G, and the combined action of the said rollers in conjunction with the apron H, is formed effectually to remove any husks, the roots of which may not have
10 been severed from the ear.

- 15 If made not more than two inches in diameter, the husking rollers cause no difficulty by entangling the ears. The degree of inclination of the rollers may be varied at pleasure and a spring may be employed if necessary to press the apron against them.

It may be observed that the rollers F, G, and apron H, may be employed to husk corn without cutting off the peduncle, the said rollers and apron being placed in any position that may be preferred. 25

I claim as new and of my invention herein:—

1. The feed drum A, provided with ear pockets M N O, when used in the described combination with the knife D, and husking peg E, for the purposes set forth. 30

2. The husking rollers F, G, constructed as described, in combination with the hinged and roughened apron H, in the manner and for the purposes set forth. 35

In testimony of which invention I hereunto set my hand.

DAVID M. MEFFORD.

Attest:

GEO. H. KNIGHT,
JAS. H. GRIDLEY.