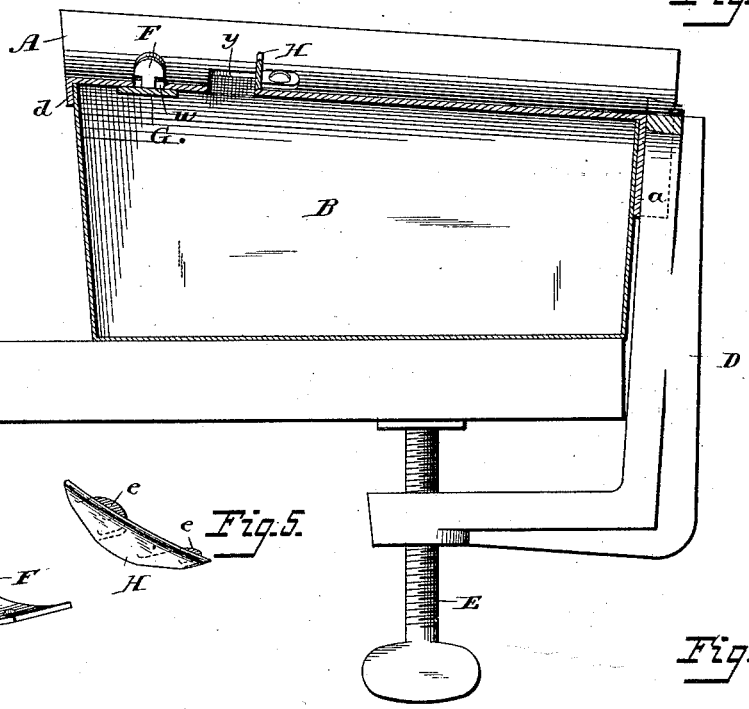
(No Model.)

E. M. C. ANDERSON.

MAIZE GRATER.

No. 302,536. Patented July 29, 1884.

Fig. 1.



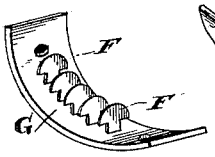
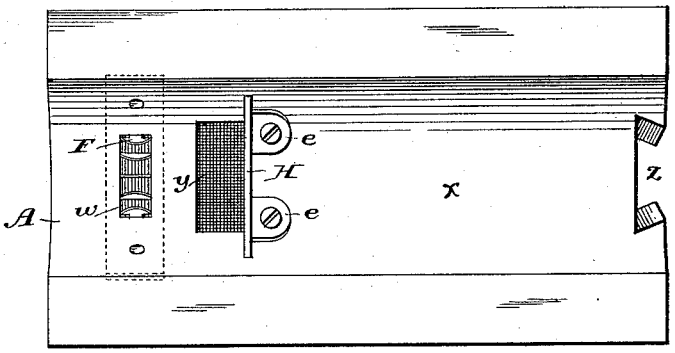


Fig. 4.

Fig. 5.

Fig. 2.



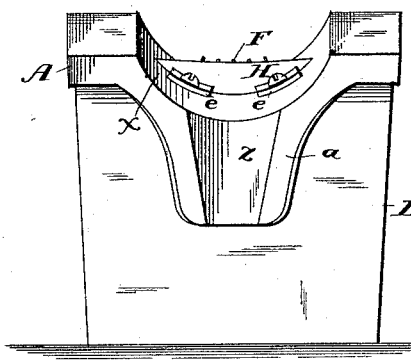


Fig. 3.

Attest:
Court. a. Cooper.
H. C. Fannmann.

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Inventor.
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UNITED STATES PATENT OFFICE.

ELIZA M. C. ANDERSON, OF NEW YORK, N. Y.

MAIZE-GRATER.

SPECIFICATION forming part of Letters Patent No. 302,536, dated July 29, 1884.

Application filed April 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, ELIZA M. C. ANDERSON, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Maize-Graters, of which the following is a specification.

My invention is a device for removing the kernels from green corn or maize without removing the husks; and it consists in certain improvements in the knives or cutters, scraper, and their support, and in the device for making the connection with the table, fully described hereinafter, and illustrated in the accompanying drawings, in which—

Figure 1 is a sectional elevation of my improved device; Fig. 2, a plan view; Fig. 3, an end view; Fig. 4, a perspective view of the cutters, and Fig. 5 a perspective view of the scraper.

The supporting plate or platform A is made, preferably, of cast metal, with a longitudinal curved recess, *x*, and two transverse openings, *w y*, and with an end projection or arm, *a*. The plate is also provided with an edge flange, *d*, to receive the edge of a trough or receptacle, B, which edge is inclined, as shown, so as to support the plate A in an inclined position; and in the arm *a* is a dovetailed recess, *z*, adapted to receive a corresponding end of an L-shaped bracket, D, the other end of which carries a clamping-screw, E, by means of which the entire device may be securely clamped to a table, as shown in Fig. 1. When the device is not in use, the screw is turned to loosen the bracket D, which may then be detached from its connection with the plate A, so as to permit the receptacle to be placed upon the table or any other suitable support, without interference from the position of the clamp. Any suitable means for connecting the clamp-bracket D to the plate A—as hooks adapted to eyes in the plate or studs fitting sockets therein—may be employed, and a cam or its equivalent may be substituted for the screw E.

The knives or cutters F, instead of consisting of pointed blades, as heretofore, consist each of a thin blade having a semicircular or curved upper edge—a form which I have found to be most desirable, as it will slit the sack or cuticle of the kernel without tearing it, so that it retains its connection with the cob, while the kernel can escape freely. The cutters may be connected to the plate A, within the groove *x*, at proper distances apart; but I prefer to attach them all to a carrier-plate, G, which is applied and secured to the under side of the plate A in such a position that the knives F can extend upward through the openings *w*, as shown. This facilitates the construction of the device, as the steel cutters can readily be secured in vertical positions upon a blade, G, of brass or other material, which may then be bent to correspond to the curve of a grooved portion of the plate A, and will thus cause the knives to be brought to the requisite radial position.

The scraper H is formed of one piece of metal, with lugs *e*, perforated to receive screws, by which the scraper may be screwed fast within the groove of the plate A at one edge of the opening *y*.

It will be noticed that the edge of the scraper H is rounded instead of being sharp, as in devices heretofore made, the effect being that the husks are pressed against the cob without being torn or cut therefrom in the act of expressing the kernels.

The device above described is especially intended for kerneling corn in large quantities, and is especially adapted for kitchen use and establishments making wholesale products, and it will be seen that the construction is such that all the parts may be cheaply made of cast metal with the exception of the cutters and their supporting-plate.

It will also be seen that when the cutters become dulled they may be all removed by simply detaching the plate G, permitting another plate to be quickly secured in place, and that the concave form of the plate A adjacent to the cutters prevents the expressed kernels from flying to one side away from the device, and directs them to the opening *y*, through which they will fall into the receptacle B.

I claim—

1. The combination, in a device for unkerneling corn, of a plate, A, having a longitudinal groove, *x*, and an opening, *y*, and radial cutters F upon one side of said opening, and

a scraper, H, upon the opposite side thereof, substantially as set forth.

2. The combination, with a recessed plate and its scraper, of a series of knives connected to a bent plate, G, attached to said plate A, substantially as specified.

3. The combination, with the plate A, its scraper, and opening *y*, of a series of knives, each having a semicircular cutting-edge, for the purpose set forth.

4. The combination of the plate A, its knives and opening *y*, and a scraper, H, having a rounded upper edge, for the purpose specified.

5. The combination of the receptacle B, plate A, having a longitudinal depression or recess, an opening, *y*, cutters secured to the plate, connected detachably to the plate A, and scraper, also connected detachably to said plate, as set forth.

6. The combination of the receptacle B, plate A, provided with cutters and scraper, bracket D, connected detachably to the plate, and a securing device, E, substantially as specified.

7. The combination of the plate A, having a dovetailed recess, receptacle B, bracket D, with an end adapted to said recess and provided with a clamping-screw, E, substantially as set forth.

8. The combination of the curved supporting-plate and series of knives secured to a flexible plate, G, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELIZA M. C. ANDERSON.

Witnesses:

G. N. BARDIN,

N. B. CLINCH.