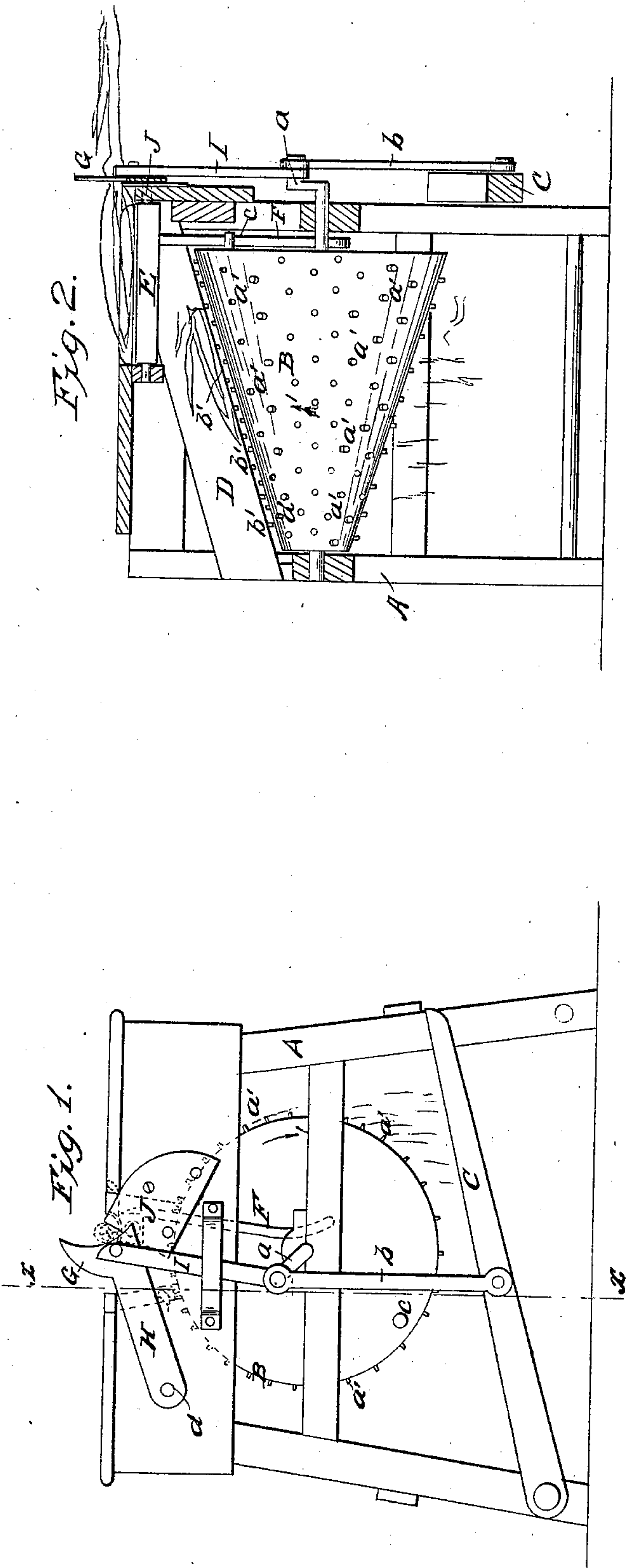


L. A. GROVER.
MACHINE FOR HUSKING CORN.

No. 20,849.

Patented July 6, 1858.



UNITED STATES PATENT OFFICE.

L. A. GROVER, OF ROXBURY, MASSACHUSETTS, ASSIGNOR TO HIMSELF, AND N. T. SPEAR,
OF BOSTON, MASSACHUSETTS.

CORN-HUSKER.

Specification of Letters Patent No. 20,849, dated July 6, 1858.

To all whom it may concern:

Be it known that I, LEONARD A. GROVER, of Roxbury, in the county of Norfolk and State of Massachusetts, have invented a new and Improved Machine for Husking Corn and Slitting the Husks for Upholstery Purposes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is an end view of a machine constructed according to my invention. Fig. 2, is a longitudinal vertical section of ditto taken in the line x, x , Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in the employment or use of shears or a cutting device, tilting bed or hopper, and a rotating toothed cone and guide plates, combined and arranged so as to operate and effect the desired result as hereinafter fully shown and described.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a rectangular frame in which a horizontal conical cone B, is placed. One end of the shaft of the cone projects beyond the side of the frame A, and has a crank a , formed on it, to which the pitman b , of a treadle C, is attached. The cone B, is armed with teeth a' , and two guide plates or boards D, are fitted in the frame A, directly over the cone, said plates or boards being placed at a suitable distance apart and forming a trough as will be hereinafter described. The lower edge of one of the plates or boards D, is armed with teeth b' , which are so placed or disposed relatively with the teeth a' , of the cone B, that the latter may as the cone rotates pass between the teeth b' . This will be distinctly understood by referring to Fig. 2.

To the larger end of the cone B, near its periphery a pin c , is attached, said pin projecting horizontally out from the cone. And in the upper part of the frame A, a bed or hopper E, is placed. This bed or hopper is of concave form and of sufficient dimensions to receive an ear of corn. The bed or hopper has its ends pivoted in the frame so that it may tilt or swing freely, and a pendent F, is attached to the bed or

hopper, said pendent being in the plane of rotation of the pin c . The pendent F, serves as a weight or counterpoise and keeps the bed or hopper in an upright position when not otherwise acted upon.

To the end of the frame A, and adjoining the end of the bed or hopper E, a knife or cutter G, is placed. This knife or cutter is formed on or attached to the end of a bar H, which is pivoted to the end of the frame A, as shown at d . The cutting edge of the knife is of concave form as shown clearly in Fig. 1, and the knife is connected by a rod I, with the crank a . J, is a stationary knife which is attached to the end of the frame A, and in such relation to the knife or cutter G, that the latter will, as it is vibrated, pass over the cutting edge of J.

The operation is as follows:—The ears in the husk are placed in the frame A, the top of which is provided with a platform. The operator by actuating the treadle C, rotates the cone B, and a vibratory movement is at the same time given the knife or cutter G, together with a tilting movement of the bed or hopper E. The operator places an ear of corn in the bed or hopper E, the butt of which at its junction with the ear is placed against the edge of the stationary knife J, and as the knife G descends the butt will be severed from the ear, and simultaneously with the severing of the butt, the bed or hopper E, is tilted in consequence of the pin c , striking against the pendent F, and the ear with butt detached falls on the surface of the cone B, between the plates or boards D, D. The cone rotates in the direction indicated by arrow 1, and the husks are stripped from the ear by the teeth a' , b' , the husks being dragged or pulled between the teeth b' , and slitted or shred into strips or pieces suitable for upholstery purposes. The stripped or husked ears are discharged from the smaller end of the cone, the ears of course pass down discharging themselves by their own gravity. It is designed to place a large quantity of ears on the platform within the reach of the operator so that the latter may grasp them and place them in the bed or platform E, one by one, and as fast as the butts are cut off and the ears discharged therefrom.

I do not claim a revolving toothed cone B, and toothed plate D, separately, for they or

their equivalents have been previously used, but,

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

The rotating toothed cone B, plates or boards D, D, one being provided with teeth *b'*, in combination with the tilting bed or

hopper E, and the vibrating knife G and stationary knife J, the whole being arranged to operate as and for the purpose set forth. 10

LEONARD A. GROVER.

Witnesses:

FRANKLIN WOODSIDE,
WILLIAM L. BURK.