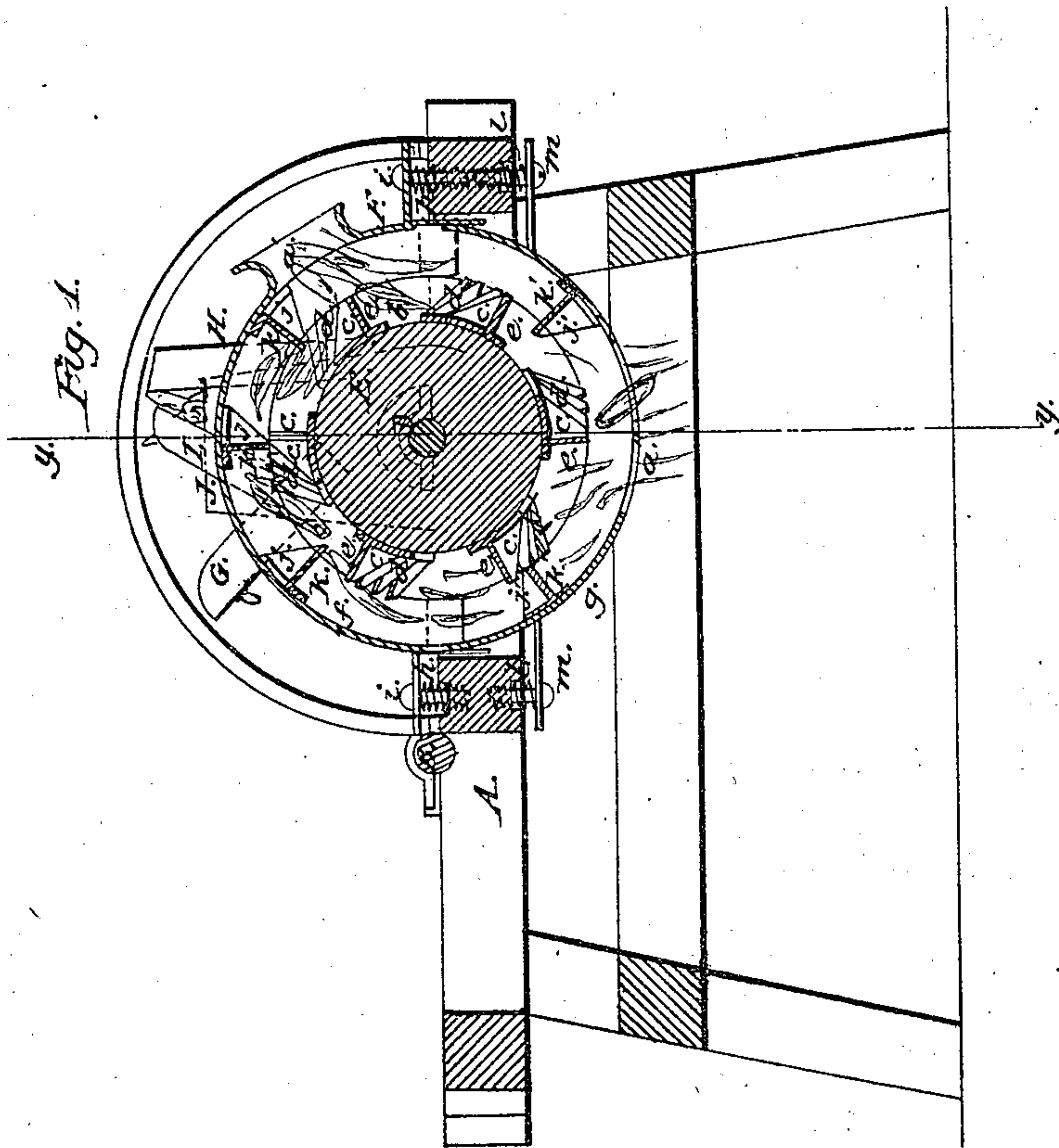
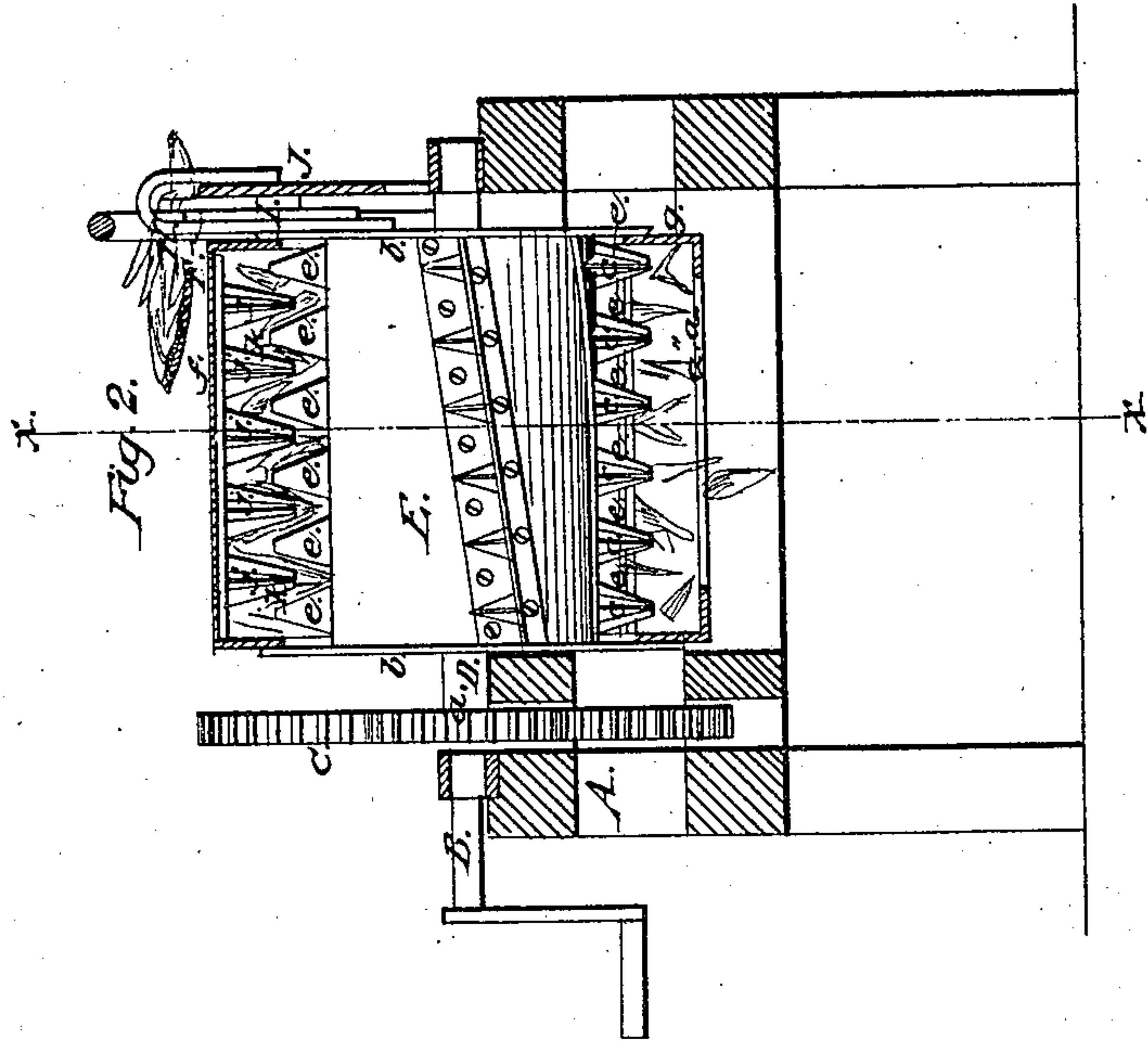


B. HAZEN.
CORN HUSKING AND SLITTING MACHINE.

No. 20,637.

Patented June 22, 1858.



UNITED STATES PATENT OFFICE.

B. HAZEN, OF CINCINNATI, OHIO.

CORN-HUSKER.

Specification of Letters Patent No. 20,637, dated June 22, 1858.

To all whom it may concern:

Be it known that I, BURTON HAZEN, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Machine for Stripping the Husks from the Ears of Indian Corn; 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, forming a part of this specification, in which—

Figure 1, is a longitudinal vertical section of my invention taken in the line *x, x*, Fig. 2. Fig. 2, is a transverse vertical section of the same, taken in the line *y, y*, Fig. 1.

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

This invention consists in the employment or use of a stationary and rotating knife and rotating hammer arranged and operating as hereinafter shown for the purpose of stripping the husks from the ears.

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

A, represents a framing which may be constructed in any proper way to support the working parts.

B, is a driving shaft which is placed transversely on the upper part of the framing said shaft having a spur wheel C, placed on it, said wheel gearing into a pinion *a*, on a shaft D, which is placed on the framing A, parallel with the shaft B. On the shaft D, a cylinder E, is placed, said cylinder having a flanch *b*, at each side of it. To the periphery of the cylinder E, a series of knives or cutters *c*, are attached in diagonal or oblique rows, as shown clearly in Fig. 2. These cutters project out radially from the periphery of the cylinder and are of taper form their cutting edges *d*, being inclined and their opposite or back edges radial with the cylinder, see Fig. 1. At the back part of each cutter *c*, there is a plate *e*. These plates are attached to the periphery of the cylinder E, and they are of taper form and project a certain distance beyond each side of the cutters, as shown clearly in Fig. 2. The cylinder E, is encompassed by a cylindrical shell F, which is formed of two parts *f, g*. The part *f*, covers the upper portion of the cylinder E, and its ends rest on springs *h*, which are fitted in the framing A, the part *f*, being retained in proper position by screws *i*, which serve as guides and

also to regulate the position of the part *f*, as will be presently more particularly referred to. To the inner surface of the part *f*, of the shell F, a series of cutters *j*, are attached. These cutters are precisely the same as those *c*, on the cylinder E, but they are placed in rows parallel with the axis of the shell and cylinder, instead of obliquely with it, as the cutters *c*. The cutters *j*, have each a plate *k*, at their back edges, said plates corresponding with the plates *e*, of the cutters *c*. The other part *g*, of the shell F, is arranged precisely the same as the part *f*, is provided with similar cutters *j'*, and plates *k'*. The ends of the part *g*, also bear against springs *l*, and are retained against them by screws *m*. The cutters *c*, and plates *e*, of the cylinder E, are placed out of line with the cutters *j, j'*, of the shell F, so that as the cylinder rotates its cutters *c*, and plates *e*, will pass between the cutters *j, j'*, and plates *k, k'*, of the shell F, see Fig. 2.

To one or both ends of the cylinder E, a knife G, is attached, said knife having a tangential position relatively with the cylinder. A bar H, is also attached tangentially to the same end of the cylinder E', the outer part of the bar being bent so as to form a loop, see Fig. 2.

I, is a stationary knife which is attached in an inclined position to an upright plate J, at one side of the framing A, and adjoining the plane of rotation of the knife G. The loop of bar H, as the cylinder E, rotates passes over the stationary knife I, and plate J, see Fig. 2.

K, is a semi-circular guard attached to the framing A, and extending over the knives, see Fig. 1.

The operation is as follows: Motion is given the shaft B, in any proper way and the operator grasps the ears of corn which are in the husk, at their points, one by one, and places their butts against the stationary knife I, the butts being placed against the knife at their junction with the ears, as the cylinder E, rotates the knife G, severs the butts from the ears, the position of the knives preventing the ears from being forced upward and free from them under the force of the cut or blow, and the bar or loop H, which serves as a hammer, strikes the ear, and throws it from the grasp of the operator who still retains the husk. The husk is then thrown by the operator within the shell

F, an aperture a' , being made for such purpose in the part f , of the shell, and the husk is properly slitted or shred by the action of the cutters c, j, j' , and plates e, k, k' , the
5 husks being discharged through an aperture a'' , in the part g , of the shell F, and in a finely slitted state, suitable for upholstery purposes. The springs h, l , allow the shell to yield or give so as to prevent the machine from becoming choked or clogged.
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Having thus described my invention what

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

The stationary and rotating knives I, G, and rotating bar or hammer H, combined 15 and arranged to operate as and for the purpose set forth.

BURTON HAZEN.

Witnesses:

N. MARCHARD,

GEO. W. GARRETT.