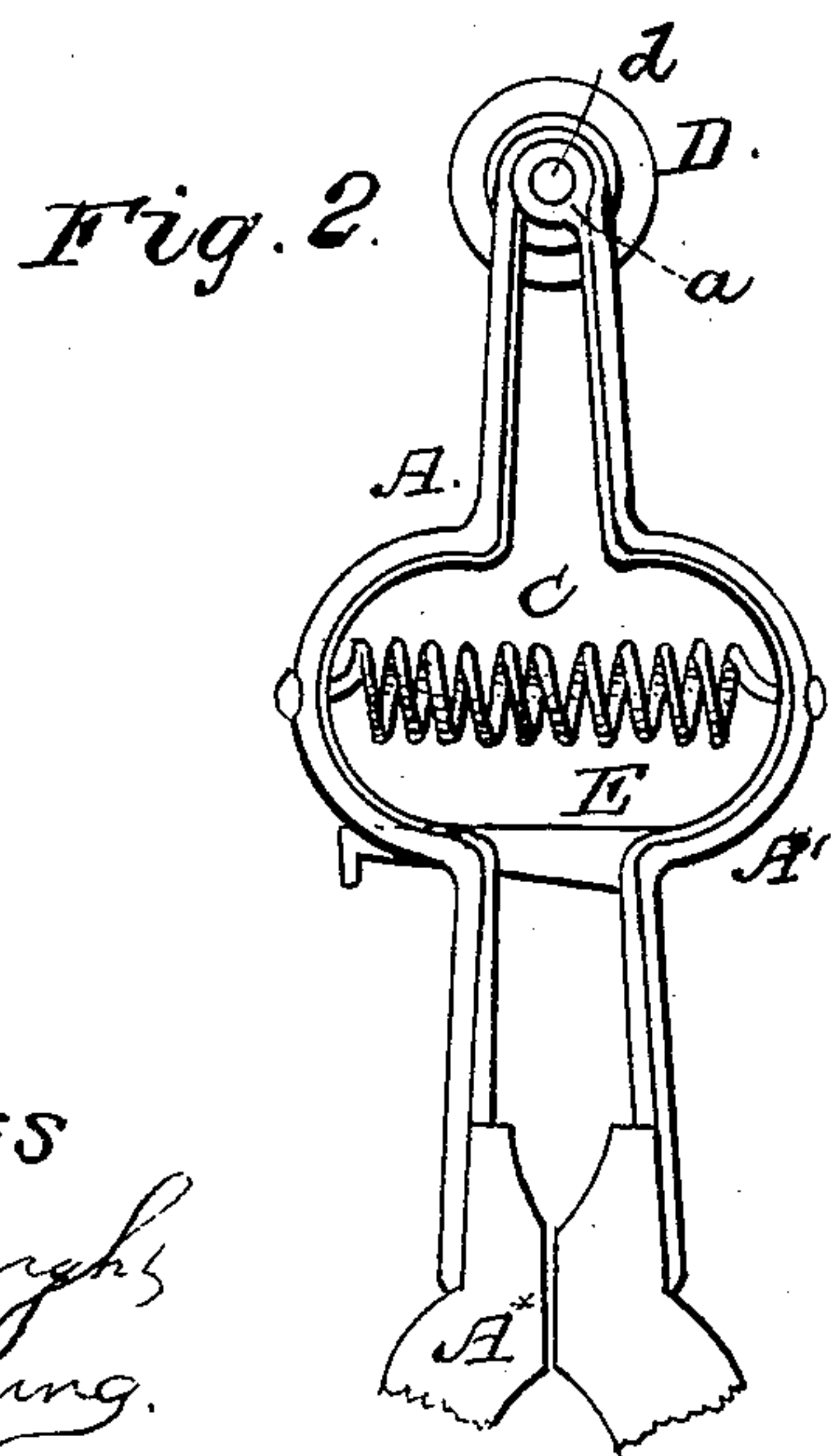
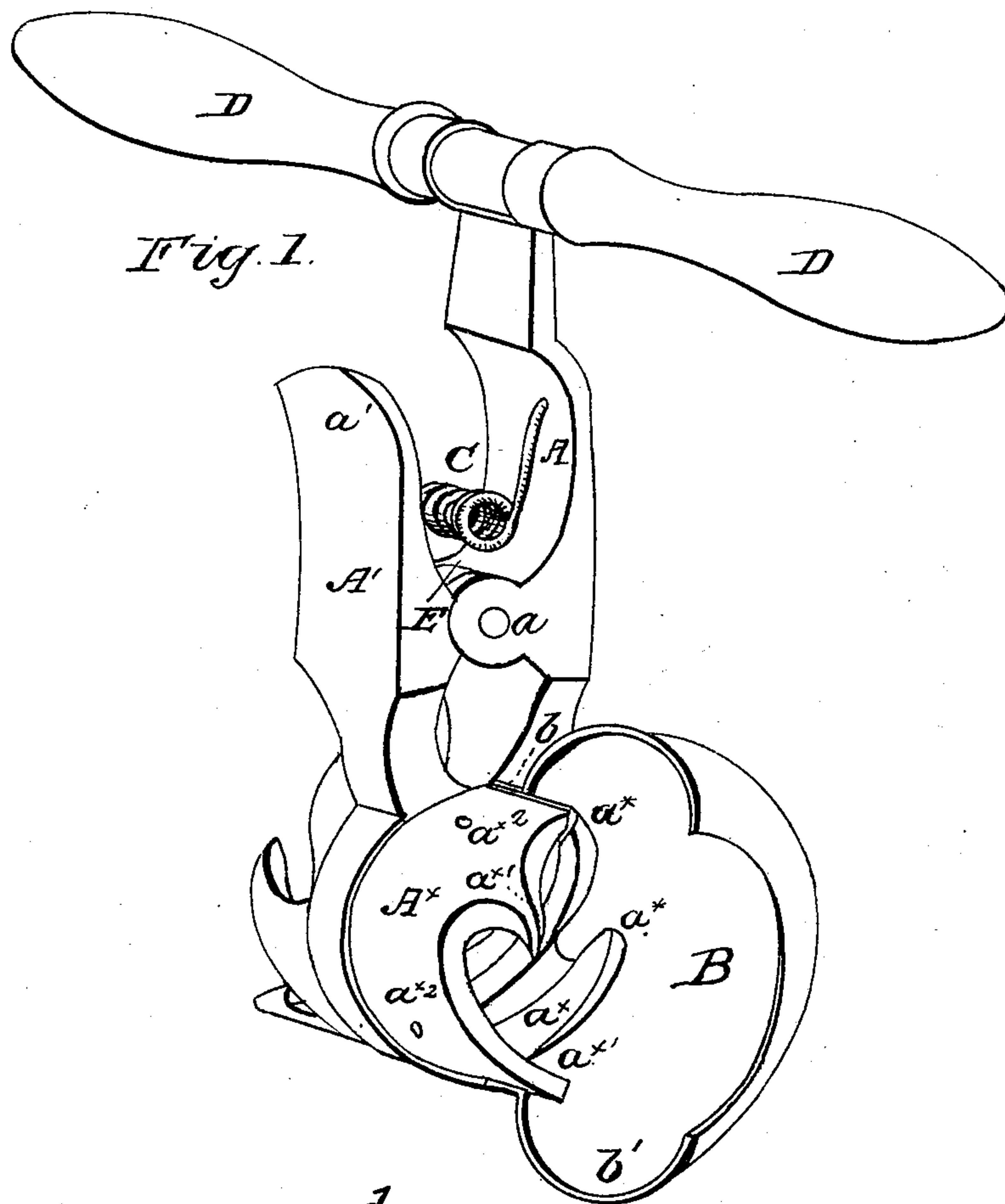


J. BOWLES.  
Corn Sheller.

No. 89,550.

Patented May 4, 1869.



WITNESSES  
Octavius Knight  
W. B. Dering.

INVENTOR  
John Bowles



# United States Patent Office.

JOHN BOWLES, OF AUGUSTA, GEORGIA.

Letters Patent No. 89,550, dated May 4, 1869.

## IMPROVEMENT IN CORN-SHELLERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN BOWLES, of Augusta, in the county of Richmond, and State of Georgia, have invented certain new and useful Improvements in Corn-Shellers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, which is made a part of this specification.

My invention relates to that form or class of hand corn-shellers which consists essentially of a pair of hinged jaws, having a cavity for the reception of the ear, provided with spiral teeth, or ribs, to remove the grains, by the revolution of the jaws around the ear, which is held from turning in the hand of the operator, said jaws being pressed together by means of a spring, and provided with a pair of handles, by which to rotate them.

My improvements consist—

First, in providing the mouth of the shelling-cylinder with three or more equally prominent receiving-points or projections, (instead of two, as heretofore,) for the purpose of adapting them to more readily engage with the ear, and more steadily feed it.

Second, in the provision of a shield, or funnel, at the receiving-end of the shelling-cylinder, to prevent the grain scattering, and to facilitate its discharge into a receptacle beneath.

Third, in the arrangement of the spring between the jaws, so as to cause it to be guarded by them.

Fourth, in the provision of an arm, or bar, arranged between the handle and the shelling-cylinder, to support its parts against edgewise displacement.

In the drawing—

Figure 1 represents a perspective view of a corn-sheller embodying my improvements in their preferred form, one-half of the shield, or funnel, being omitted to expose parts beneath.

Figure 2 is a partial edge or end view, with one handle removed, of a modified form of my improved corn-sheller.

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

A A' may represent a pair of jaws, hinged together at *a*, and each provided with a semi-cylindrical enlargement, forming together a hollow cylinder, A\*, provided on its under surface with spiral ribs, or teeth *a\**, terminating in three or more points or projections, *a\*1*, at about equal distance apart, and adapted to engage simultaneously and equally with the ear, the removal of the corn from which they serve principally to effect, the ribs, or teeth within the cylinder serving more to feed the ear through. The equal action of said points or projections at three or more points in the circumference of the ear, serves to retain the ear in the centre of the cylinder, thus rendering the simple holding it from turning all that is required to be done by the hand of the operator.

B, fig. 1, represents a shield, or funnel, which may be of spheroidal (as shown) or other suitable form, and which is constructed in two parts, corresponding with those of the cylinder A\*, to which they are attached, by means of screws passing through the flange *b* of

said shield, or funnel, and into holes *a\*2* in said cylinder A\*, as shown, or by other suitable fastening. This shield, or funnel, serves to prevent the corn scattering as it is removed from the cob, and also to facilitate its discharge into a receiver beneath, a sufficient opening being left between their edges at *b'* for this purpose. Said shield, or funnel, may be applied to either or both ends of the shelling-cylinder, as desired, and when but one is employed, as shown, it may be made removable and adapted to be applied to either end.

C represents a spring, which may be of any suitable form, employed to press or draw the parts of the shelling-cylinder A\*, and shield, or funnel B, together, and arranged between the jaws A A' on either side of their fulcrum, or hinge, as desired, or as the position of their fulcrum may necessitate. When arranged between the fulcrum and the shelling-cylinder, as represented in fig. 2, the jaws may be bowed or distended, as shown, to accommodate a longer spring. The jaws may, in either case, more or less completely envelop the spring, as desired. This arrangement of the spring guards it, prevents its catching in the clothes of the operator, &c., and avoids any inconvenient projection of the springs, or their attachments, outside of the frame.

D D represent a pair of handles, connected by a pin, *d*, fig. 2, on which are hinged one or both of the jaws A A', according as their fulcrum is between that point and the shelling-cylinder, as represented in fig. 1, or at that point as in fig. 2, said pin in the latter case forming the fulcrum of the jaws. The loose end *a'*, fig. 1, of the jaw A', in the former arrangement, forms a handle, by depressing which with the thumb, the jaws may be opened to facilitate the introduction of the ear into the shelling-cylinder, when this would otherwise be rendered difficult, by reason of the end of an ear being unusually large or blunt, or in case of the common tapering end having been broken off. Under other circumstances any opening of the jaws by hand is unnecessary.

E represents an arm or bar, projecting rigidly from the jaw A' at a point intermediate between the handles and shelling-cylinder, and so engaging with the other jaw, A, as to prevent the displacement of the parts of the shelling-cylinder A\* by the longitudinal strain occasioned by removing the grains, by means of the spiral teeth, or ribs, as described, thus securing the perfect action of said teeth on the ear, rendering the operation more easy, and lessening the danger of breakage. This arm or bar may, as represented in fig. 1, form one of the hinges through which the fulcrum-pin *a* passes, when said fulcrum is located between the handles and the shelling-cylinder; or, as represented in fig. 2, a stop to limit the distension of the jaws when the fulcrum is removed to the axis of the handles.

The several parts of the instrument may be made of any suitable material, and the precise form and combinations shown may be varied without departing from my invention.

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

1. I claim, in combination with the shelling-cylinder



A\* a\*, the equidistant and equiprominent points or projections a\*<sup>1</sup> a\*<sup>1</sup> a\*<sup>1</sup>, three or more, as and for the purposes specified.

2. I claim the shield, or funnel B, constructed and arranged substantially as described, in combination with the shelling-cylinder A\*, for the purpose set forth.

3. I claim, in combination with the shelling-cylinder A\* a\*, the spring C, arranged between the jaws A' A, substantially in the manner described, for the purposes specified.

4. I claim the rigid arm or bar E, projecting rigidly from one of the jaws, and so engaging with the other as to prevent the longitudinal or edgewise displacement of the parts of the shelling-cylinder, substantially as and for the purpose described.

JOHN BOWLES.

Witnesses:

WM. H. BRERETON, Jr.,  
OCTAVIOUS KNIGHT.