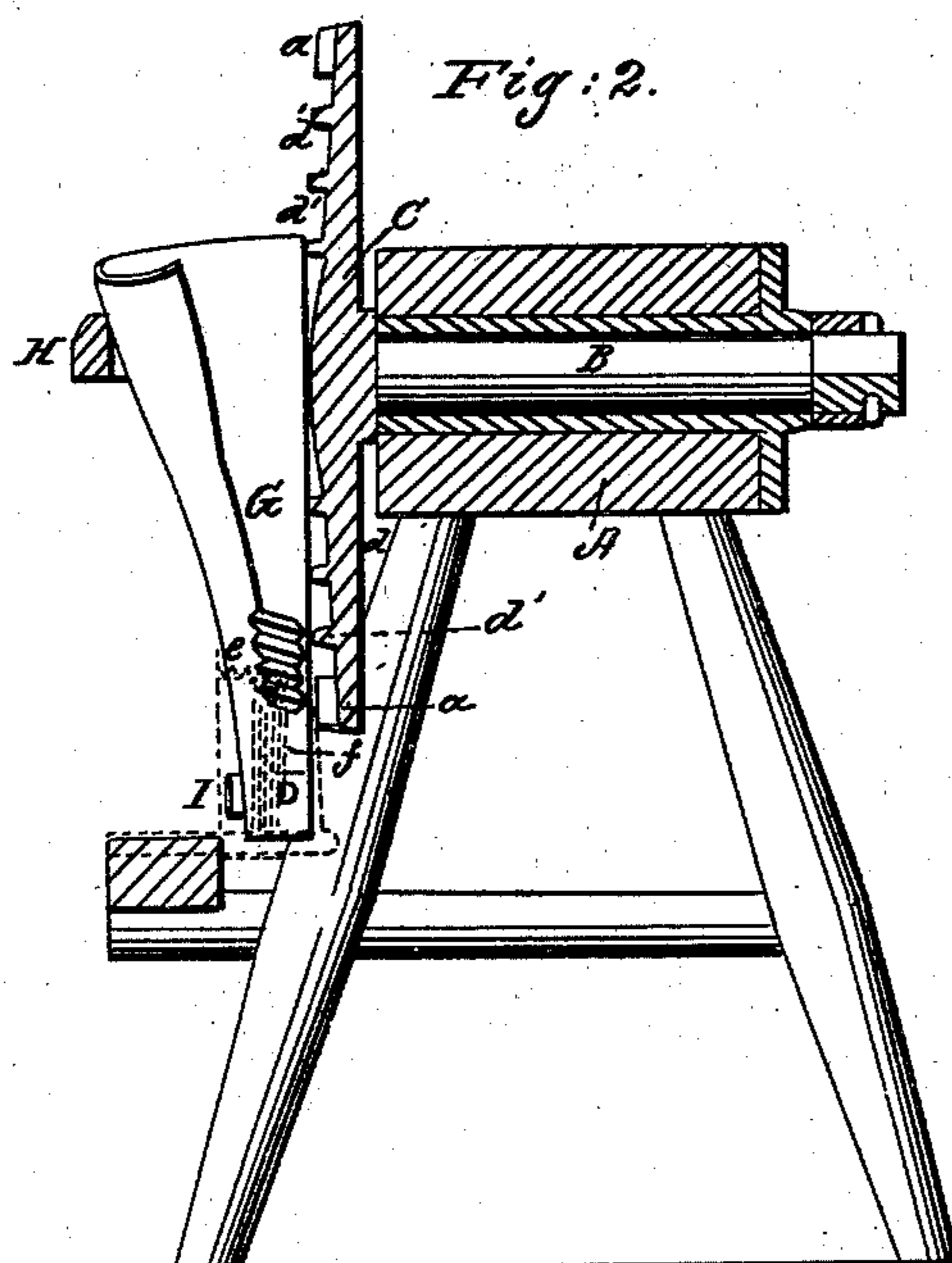
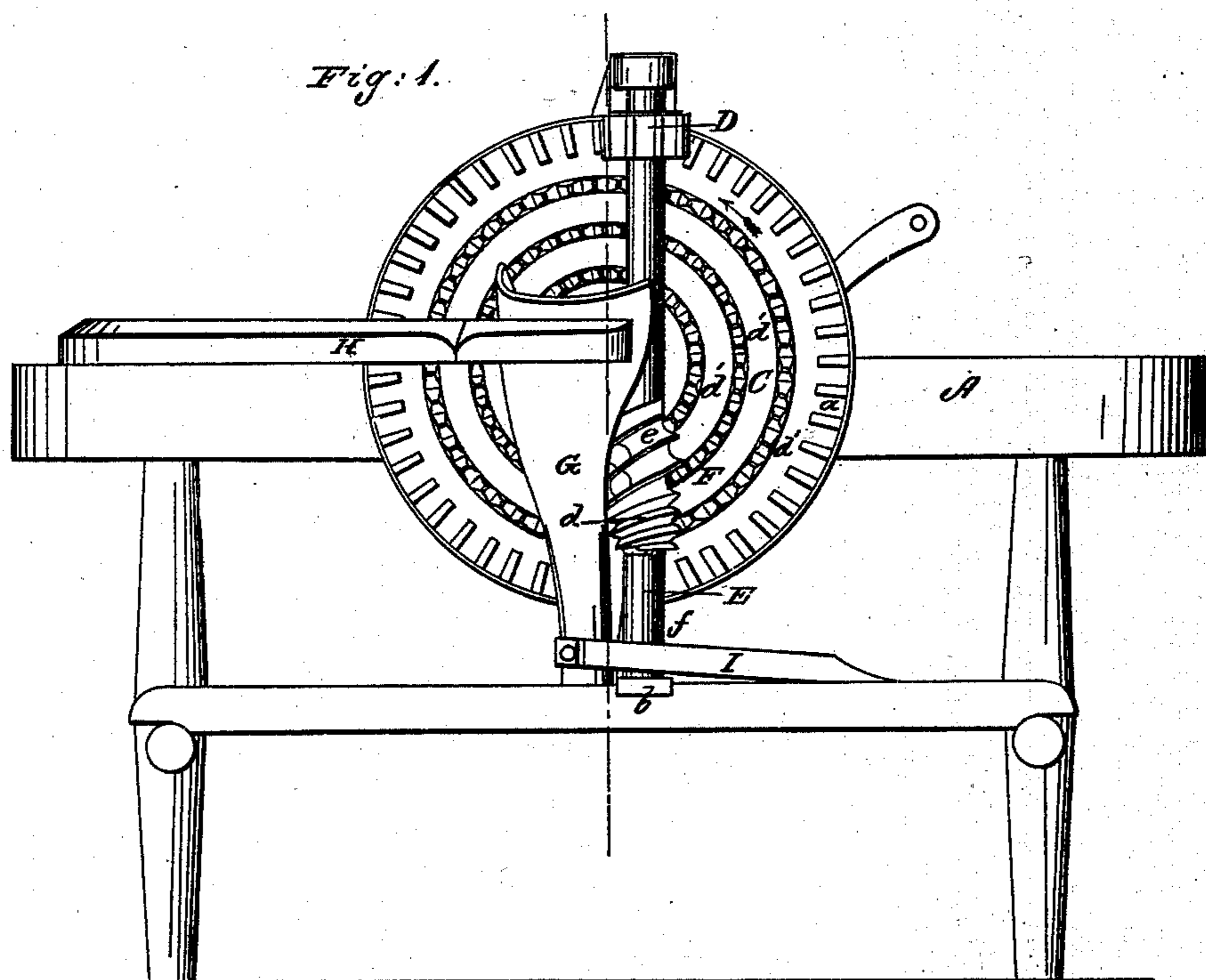


B. BRIDENDOLPH.
Corn Sheller.

No. 26,471.

Patented Dec. 20, 1859.



Witnesses:

Inventor:

Jacob Gosey
J. F. Little

B. Bridendolph.

UNITED STATES PATENT OFFICE.

B. BRIDENDOLPH, OF CLEAR SPRING, MARYLAND.

CORN-SHELLER.

Specification of Letters Patent No. 26,471, dated December 20, 1859.

To all whom it may concern:

Be it known that I, B. BRIDENDOLPH, of Clear Spring, in the county of Washington and State of Maryland, have invented a new and Improved Corn-Sheller; 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 a side view of my invention. Fig. 2, is a transverse section of the same, taken in the line *x, x*, Fig. 1.

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

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

A, represents a horizontal bed-piece, which is supported at a suitable height by any proper framing, and B, is a horizontal shaft which is placed transversely in the bed-piece and has a crank or driving pulley at one end, and a face wheel C, at the opposite end. The face wheel C, is toothed at its face side at its edge, as shown at *a*, and a pinion D, engages with said teeth, the pinion being on the upper end of a vertical shaft E, the lower end of which is stepped in a plate *b*, on the framing. On this shaft E, there is a screw F, formed of one or more threads. The lower part of this screw is of larger diameter than the upper part, and the thread at the upper part *c*, of the screw has a greater pitch than the thread at the lower part *d*. The thread has also a wider and deeper space between its convolutions at the upper part *c*, of the screw than at the lower part, as plainly shown in Fig. 1. The wheel C, is corrugated or toothed centrally, or within the space inclosed by the teeth *a*, as shown at *d'*.

G, is a spout or trunk of taper form, the upper end of which is attached to a bar H, secured to the framing. The lower end of the spout or trunk is attached to a spring I, which has a tendency to keep the spout or trunk toward the face wheel C. The lower part of the spout or trunk G, is provided with internal screw threads *e*, corresponding in pitch and dimensions with the thread at the lower part *d*, of the screw.

Between the lower part of the shaft E, and the spout or trunk G, a guard *f*, is placed to insure the ears passing down straight in the spout or trunk.

The operation is as follows: The shaft B, is rotated by hand, or other convenient power, and in the direction indicated by the arrow. The ears of corn are fed point downward, into the spout or trunk G. The wheel C, rotates the ears in the spout or trunk, and also rotates the shaft E. The lower part *d*, of the screw F, assisted by the screw corrugations *e*, in the lower part of the spout or trunk feed the ears downward, while the upper part *c*, of the screw, in consequence of its quicker thread, shells the corn from the cob, the shelling operation being due to the difference in the pitch of the upper and lower parts *c*, *d*, of the thread of the screw.

The upper part *c*, of the screw is made of less diameter than the lower part so that it shall not, as the lower and larger part, feed the ear downward, but act on the corn only and shell it from the cob, and the space between the convolutions of the upper part *c*, of the screw are made deep in order to prevent the choking and clogging of the screw. The spring I, keeps the ears of corn in the spout or trunk in contact with wheel C, and screw E, and compensates for the varying size of the ears.

This machine will operate rapidly and with but a very moderate expenditure of power, performing its work in a perfect manner.

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

The differential feeding and shelling screw F, constructed as described, in combination with the spout or trunk G and face wheel C, when these several parts are arranged, and operate together, in the manner described for the purpose specified.

B. BRIDENDOLPH.

Witnesses:

JACOB COSEY,
I. F. LITTLE.