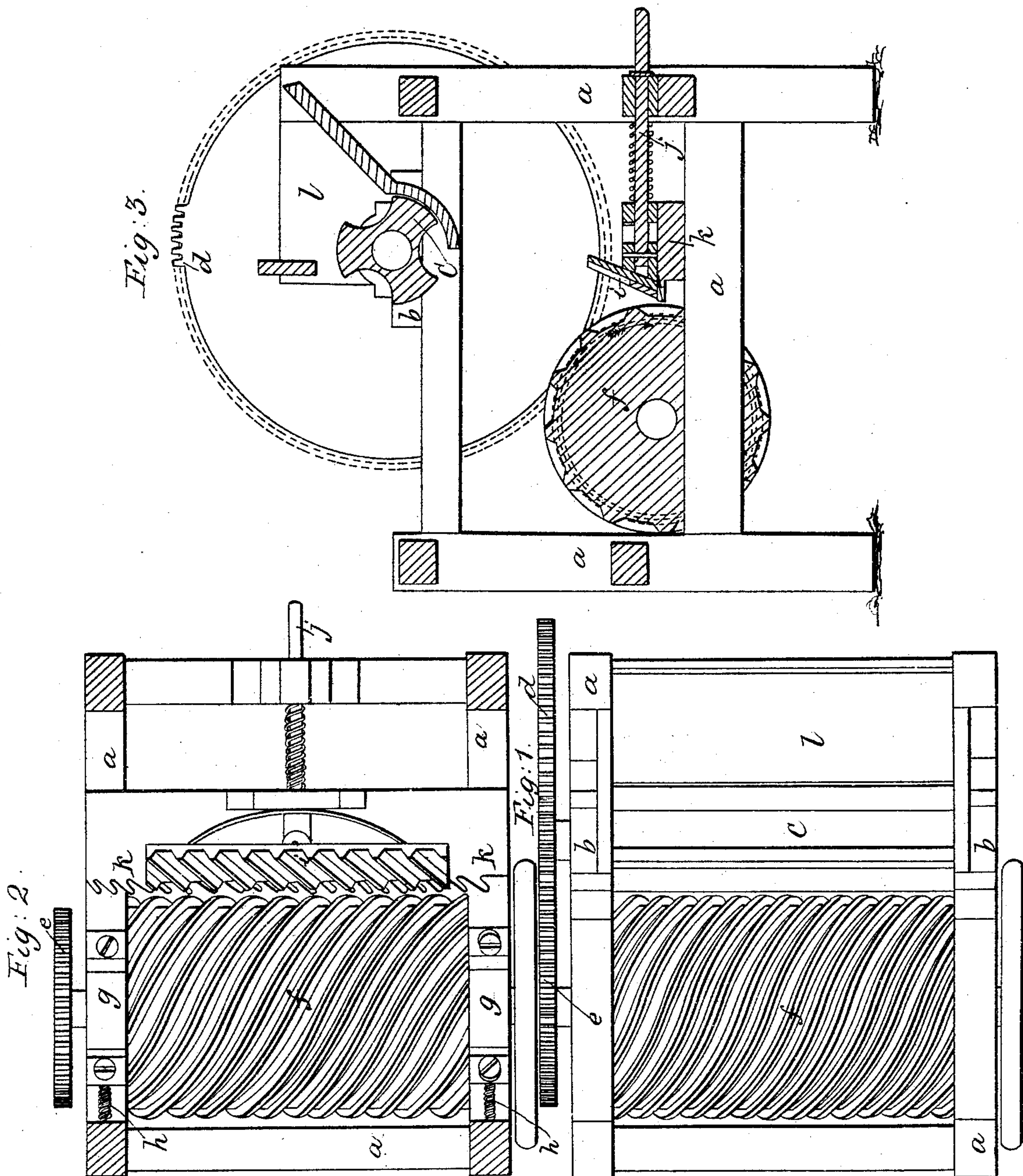


E. M. STEVENS.

Corn Sheller.

No. 16,291.

Patented Dec. 23, 1856.



Witness
J. B. May

Inventor
E. M. Stevens

UNITED STATES PATENT OFFICE.

EDGAR M. STEVENS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO ELMER TOWNSEND, OF BOSTON, MASSACHUSETTS.

CORN-SHELLER.

Specification of Letters Patent No. 16,291, dated December 23, 1856.

To all whom it may concern:

Be it known that I, EDGAR M. STEVENS, of the city of Boston, in the county of Suffolk and State of Massachusetts, have invented a
5 new and useful Improvement in the Corn-Shelling Machine; and I do hereby declare that the following is a clear, full, and exact description thereof, reference being had to the accompanying drawings and to the let-
10 ters of reference marked thereon.

Figure 1 is a plan, Fig. 2 a sectional plan, and Fig. 3 a sectional elevation illustrating my invention, and in which similar letters refer to similar parts.

15 The nature of my invention consists in certain devices which facilitate the discharge of the cobs after the corn has been shelled therefrom.

To enable others skilled in the art to make
20 and use my invention, I will proceed to describe its construction and operation.

(*a*, *a*) is the framing of the machine.

Supported in suitable bearings (*b*, *b*), is the fluted roller (*c*), to which is fixed the
25 driving wheel (*d*), meshing into the pinion (*e*) fixed on the shaft of the shelling cylinder (*f*), which runs in bearings (*g*, *g*) constructed so as to yield to pressure against the cylinder, by means of slotted holes for
30 the holding bolts and spiral springs (*h*, *h*), to prevent damage from irregularities of size in the ears of corn, or any obstructions which may occur. The cylinder is constructed with continuous threads of a screw
35 thereon, each thread making about one convolution in the length of the cylinder.

The presser bar (*i*) is hinged to a slide (*j*), supported on the framing, upon which is a spiral spring forcing the presser bar to-
40 ward the cylinder and yielding to differences in the size of the ears of corn; the hinge permitting the presser bar to adapt itself to the taper of the ear. On the face of the presser bar next the cylinder are ribs or
45 fillets inclined in the same direction as the threads on the acting side of the cylinder.

(*k*) is a bed, supported by its ends on the framing, having teeth inclined in an opposite direction to the ribs on the presser bar, and their points are adjusted near the
50 threads on the cylinder; the space between the threads and the teeth of the bed being sufficient for the corn to drop through.

The ears of corn are placed in the hopper (*l*), and are taken up one by one in the
55 flutes of the feeding roller and dropped between the cylinder and presser bar; the rotation of the cylinder in the direction indicated by the arrow carries them down to the teeth of the bed, imparting a rotary mo-
60 tion to them between the cylinder presser bar and bed stripping the corn from the ear which latter rotating against the fillets on the presser bar and the teeth of the bed acting like the nut of a screw is pushed rap-
65 idly forward and out of the machine at one side.

In those machines on which mine is an improvement the teeth of the presser bar and bed are not arranged with any reference to
70 the discharge of the cob by its rotary movement against them but dependence for this is placed on the spiral of the teeth on the cylinder alone, the teeth of the presser bar and bed in such machines often become em-
75 bedded in the cob which is then cut into chaff by the cylinder and I find it necessary to prevent this and avoid the clogging of the machine to make the combination which
80 I claim.

What I claim as my invention and desire to secure by Letters Patent is—

The self adjusting cylinder *f* in combination with the presser bar *i* and bed *k* when all are arranged as set forth and for the
85 purpose specified.

E. M. STEVENS.

Witnesses:

GORDON MCKAY,
J. B. CROSBY.