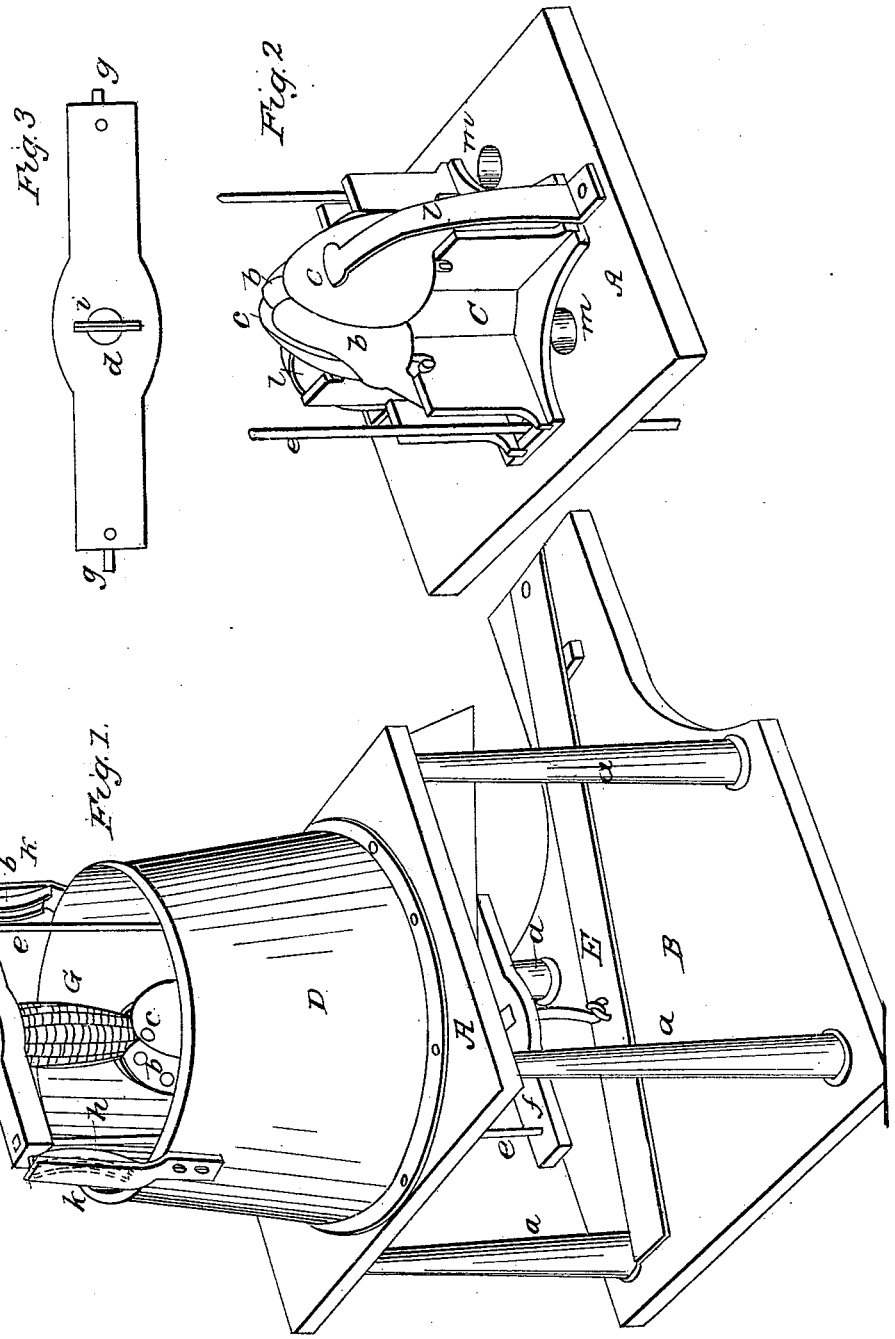
S. L. GRAVES.

Corn Sheller.

No. 7,653. Patented Sept. 17, 1850.



UNITED STATES PATENT OFFICE.

SAML. L. GRAVES, OF SPRINGFIELD, ILLINOIS.

CORN-SHELLER.

Specification of Letters Patent No. 7,653, dated September 17, 1850.

To all whom it may concern:

Be it known that I, SAMUEL L. GRAVES, of Springfield, in the county of Sangamon and State of Illinois, have invented a new and useful Improvement in Corn-Shellers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, which forms part of this specification, and in which—

Figure 1 represents a view in perspective of my cornsheller complete; Fig. 2 is a similar view of a portion of the machine detached from the rest to show more clearly its construction; and Fig. 3 is a plan of the press bar reversed.

My process of stripping the grains of corn from the cob consists in forcing the ears separately between a set of shelling plates while at the same time they are twisted on their axes.

In the accompanying drawing, A is a table to whose upper surface the cornshelling apparatus is secured and which is supported by four legs *a*, above a base board B. The shelling plates are four *b b c c* in number, they are arranged in pairs at right angles to each other and pivoted at their lower extremities to a base C; one pair is smaller than the other which laps over it, and is acted upon by springs *l* which thus force the upper edges of all four plates to approach each other. The shelling plates are inclosed in an inverted conicle case D, which prevents the scattering of the shelled corn. A crossbar *d* is supported above the shelling plates by two rods *e* which passing through the table are secured to a crossbar *f* beneath, to which motion is imparted by a spring treadle E secured to the base board. The opposite extremities of the upper crossbar are furnished with pins *g* which are guided in curved grooves *h* secured to a pair of upright standards *k* projected from the upper edge of the case D. The lower crossbar *f* is slightly hollowed at its middle and is fitted with a sharp iron *i*.

When the machine is at rest its several members occupy the positions in which they are represented in Fig. 1. The ear of corn to be shelled is inserted endwise between the upper edges of the shelling plates and the lower face of the crossbar above them, as at G. The foot of the operator is then applied to depress the treadle and thus force the ear between the shelling edges. The latter are pressed toward each other by the springs with sufficient force to remove the grains but not to enter the cob. As the crossbar *d* descends, it is turned by the action of the curved guide grooves, thus twisting the ear and greatly facilitating the action of the shelling plates. As fast as one ear is forced down, the pressure of the foot is relaxed and the spring of the treadle throws up the crossbar *d* to receive a second ear which expels the cob of the first from between the shelling plates. The shelled corn is collected by the case D from which it falls through openings *m* made in the table into suitable receptacles.

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

The device herein described for twisting and forcing the ears of corn between spring shelling plates substantially as herein set forth.

In testimony whereof I have hereto subscribed my name.

SAML. L. GRAVES.

Witnesses:

E. S. RENWICK,

P. H. WATSON.