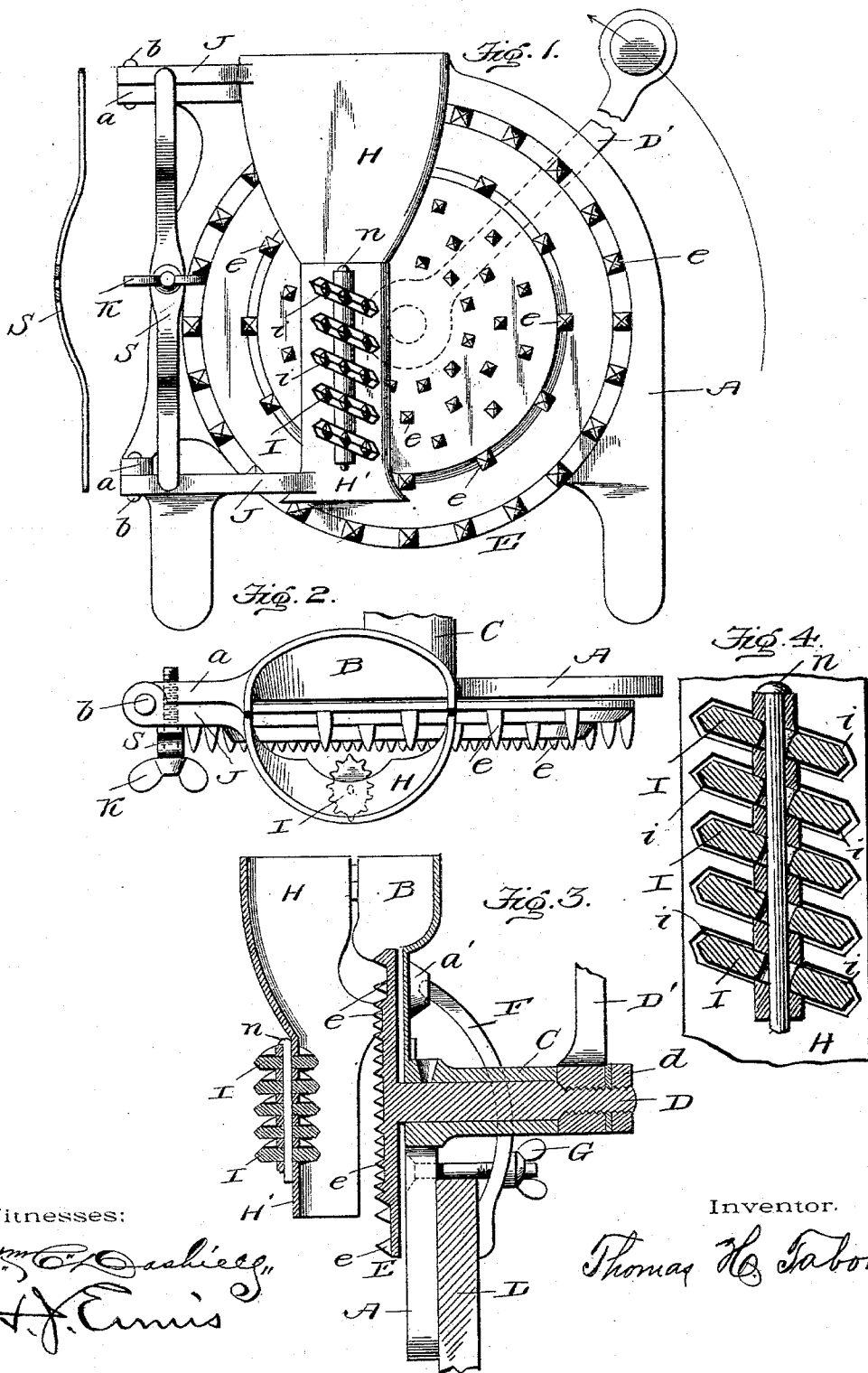


(No Model.)

T. H. TABOR.
CORN SHELLER.

No. 533,620.

Patented Feb. 5, 1895.



Witnesses:

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UNITED STATES PATENT OFFICE.

THOMAS H. TABOR, OF ELLIJAY, GEORGIA.

CORN-SHELLER.

SPECIFICATION forming part of Letters Patent No. 533,620, dated February 5, 1895.

Application filed October 29, 1894. Serial No. 527,272. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. TABOR, a citizen of the United States, residing at Ellijay, in the county of Gilmer and State of Georgia, have invented certain new and useful Improvements in Corn-Shellers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has relation to corn shellers, and more particularly to that class of hand shellers, the frame of which is detachably secured to the bin, box or other support, and having the usual rotating toothed disk, and a hopper of novel construction, whereby the rotation of the disk will effectually and rapidly remove the grains of corn from the ear when the latter is fed point foremost to said hopper, and to these ends the novelty consists in the construction, combination and arrangement of the several parts of the same as will be hereinafter more fully described and particularly pointed out in the claims.

In the accompanying drawings the same letters of reference indicate similar parts of the invention.

Figure 1 is a front elevation of my improved corn sheller. Fig. 2 is a top plan view of the same, and Fig. 3 is a vertical section of the same taken on the central vertical line of the hopper. Fig. 4 is a detailed section, showing the enlarged holes or bearings in the rollers or wheels.

A is a cast metal frame, and cast integral with it is the segmental half hopper, B, the journal sleeve, C, the brackets, *a a*, and the recessed nipple, *a'*.

D is the main shaft, and E is the shelling disk, the face of which is provided with a series of shelling teeth, *e*, the teeth, disk and shaft being all cast in one piece, and the whole is mounted in the sleeve, C, and is secured in place by the nut, *d*, on the outside of the crank arm, D', which is rotated in the direction of the arrow shown in Fig. 1.

The frame, A, may be secured to any suitable object, as, for example, the side of a box,

L, shown in Fig. 3, so that the hopper discharges the shelled corn into the box or receptacle.

The device proper is secured to the fixed support, L, by a clamp, F, and binding screw, G, the upper end of the clamp entering the nipple, *a'*, and the lower end being firmly clamped against the supports, L, as shown in Fig. 3.

H is the yielding half of the hopper proper, which has a contracted discharging neck, H', and a pair of longitudinally extended integral arms, J J. The yielding portion of the hopper is hinged through its arms, J J, to the brackets, *a a*, on the frame, A, by means of the rivets, *b b*, and a thumb screw, K, passes through a flat or leaf spring, S, and thence enters the frame, A. The outer ends of this spring, S, impinge upon the arms, J J, and by means of said thumb screw, K, the yielding portion of the hopper may be adjusted with reference to the toothed disk, and consequently the pressure of the ear of corn against the teeth on the disk regulated to insure the complete removal of all the grains, and at the same time the spring, S, allows the automatic adjustment of said hopper for variously sized ears of corn.

A peculiar feature of my improvement in the journaling in the oblique slots, *z*, in the yielding hopper section, H, of a series of beveled face anti-friction spur rollers, I, against which the ear rests, and by the action of the teeth on the opposite side of the ear of corn causes it to rotate freely against said rollers, I, thereby giving several revolutions to the ear in its passage through the hopper, and thus presenting every grain on the cob to the shelling action of the teeth on the disk. These spur rollers, I, are all mounted in the slots above described by a single pin or bolt, *n*, the holes in the wheels having sufficient play to allow them to turn freely in the oblique slots, as clearly shown in Fig. 4, and the inclination or obliquity of the rollers is such that the rotation of the ear by the toothed disk is such as to gradually feed or force the ear downwardly through the hopper until it is discharged at the lower end thereof, and, the hopper being pivoted at the top, the end of the ear is held against the teeth on the disk up to the end and every grain of corn is there-

by removed from the cob, which is impossible in the usual form of hopper provided for this class of machines, as the ear, by its not being rotated, goes through the hopper with the grains only removed from one side, owing to the friction between the ear and the rigid inside of the hopper.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. The combination with the frame, rotating toothed disk, and the rigid hopper portion, B, of the yielding hopper, H, hinged to the rigid portion, B, at the side thereof, the yielding portion, H, being adjustable to said rotating toothed disk by means of the thumb nut, K, and spring, S, and having its neck provided with oblique slots, *i*, in which are journaled

the beveled face anti-friction rollers, I, substantially as shown and described.

2. The combination with the frame having the rigid hopper portion B of the rotating toothed shelling disk and the yielding hopper H, hinged to the frame, and adjustable parallel to the face of the disk by means of the thumb-nut K and spring S, and having its neck provided with a series of oblique slots *i* in each of which is journaled a beveled faced spur roller I, the series of rollers being journaled independently of each other, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS H. TABOR.

Witnesses:

L. L. BISHOP,

G. H. MCGUIRE.