

(No Model.)

A. KIGER.
CORN SHELLER.

No. 300,872.

Patented June 24, 1884.

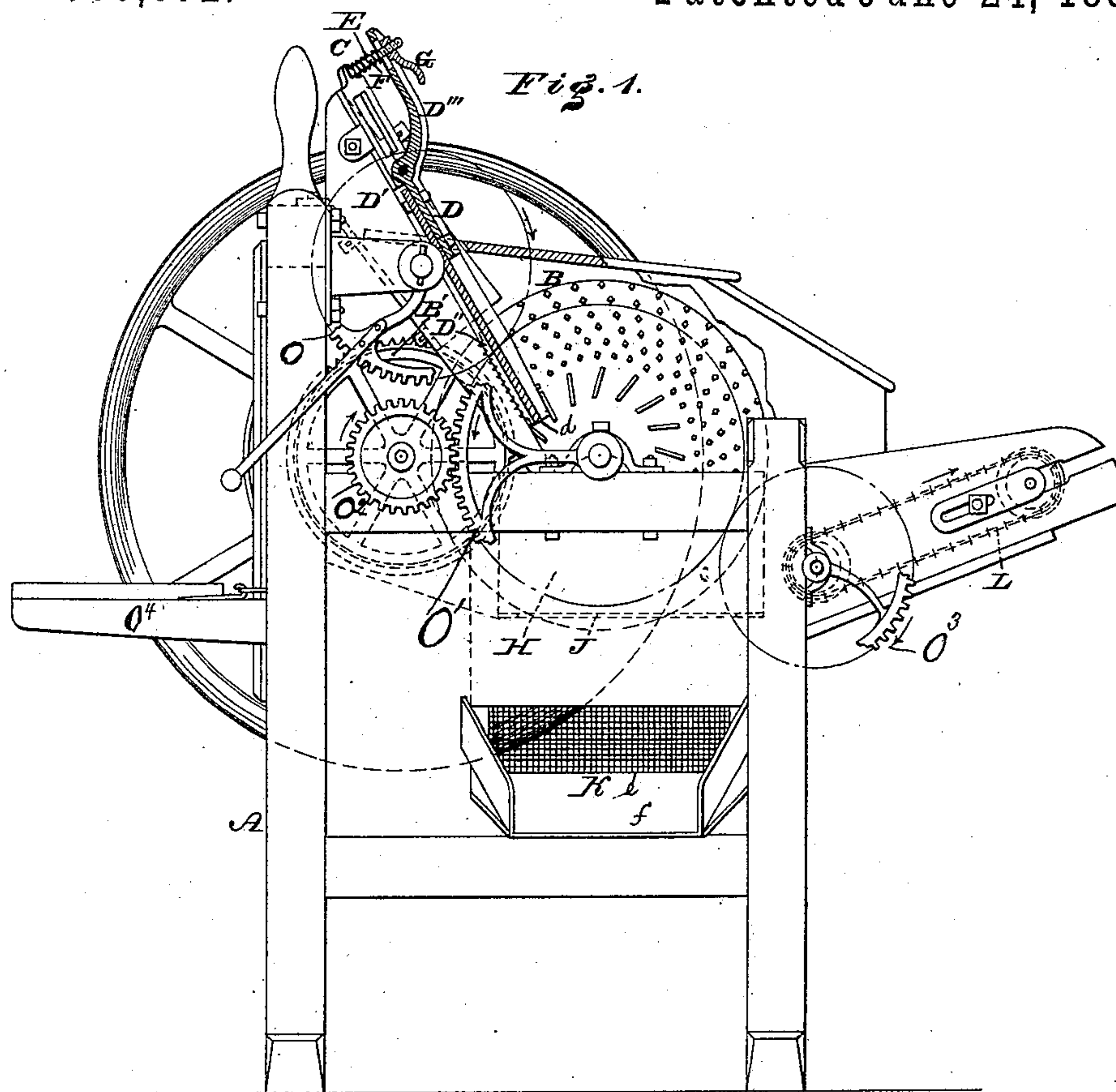
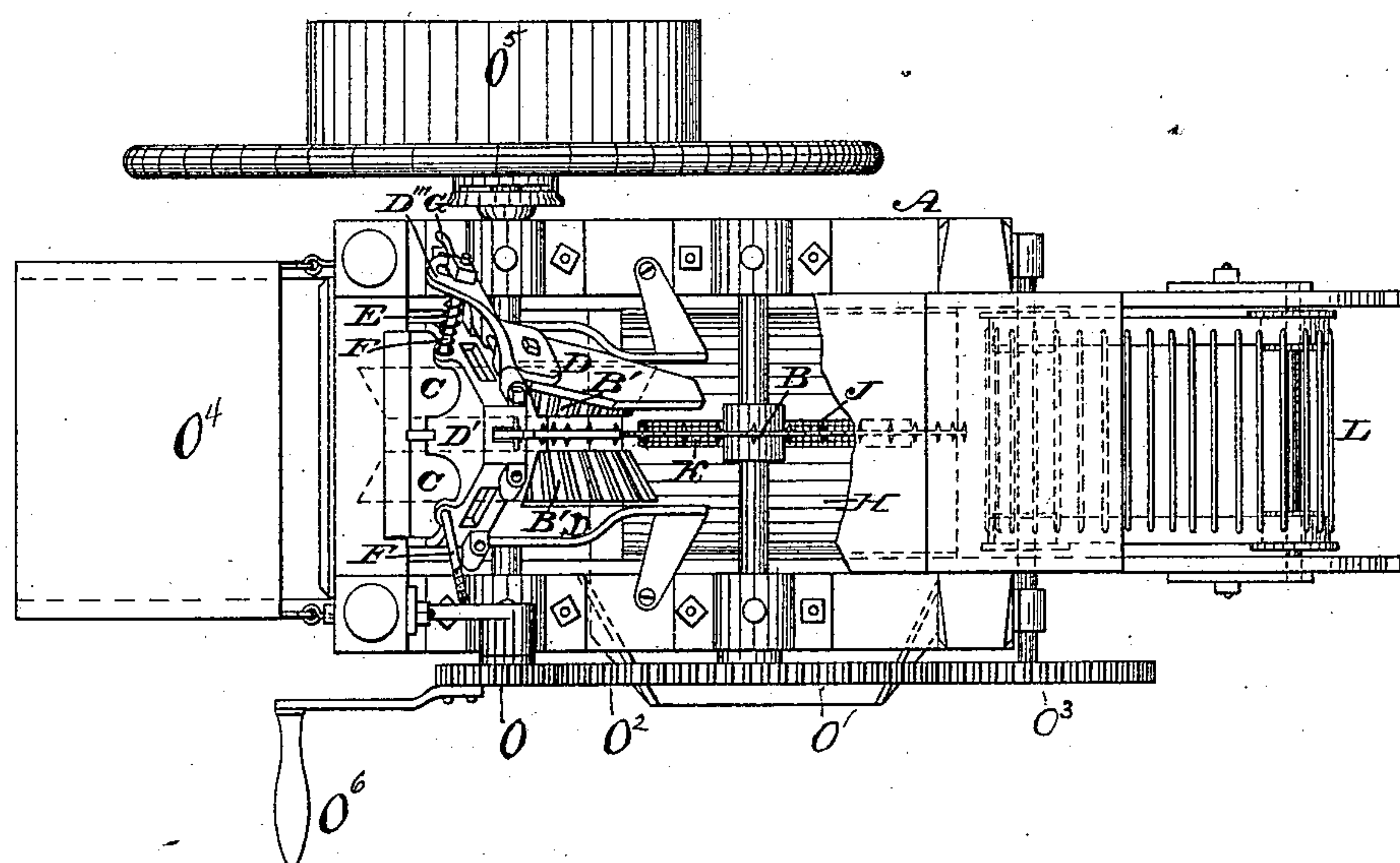


Fig. 2.



WITNESSES:

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CORN-SHELLER.

SPECIFICATION forming part of Letters Patent No. 300,872, dated June 24, 1884.

Application filed October 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALFRED KIGER, a citizen of the United States, residing at Daretown, in the county of Salem, State of New Jersey, have invented a new and useful Improvement in Corn-Shellers, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a side elevation, partly in vertical section, of a corn-sheller embodying my invention. Fig. 2 is a top or plan view thereof, partly broken away.

The same letters of reference indicate the same or corresponding parts in the two figures.

My invention consists of a corn-sheller having arms for holding the ears against the shelling-disks, the same being hinged in position so as to readily yield with the inequality in size of the ears, and provided with means for adjusting their pressure on the ears, the construction and combination of parts being hereinafter fully set forth.

Referring to the drawings, A represents the frame or casing of a corn-sheller, and B B' represent the shelling-disks mounted thereon, and rotated by means of suitable gearing, to which power may be imparted by hand or otherwise, as desired.

The gearing employed in this machine is very simple, consisting of cog-wheels O, O', O², and O³. The gear-wheel O is mounted on the driving-shaft and gears with wheel O', which is mounted on the shaft of the shelling-disk B. This wheel O' meshes with wheel O³ on one of the shafts of the endless apron or conveyer for cobs, and also with the small gear-wheel or pinion O² on the shaft of the shelling-disks B', both these latter gear-wheels, O² and O³, being driven directly by wheel O'. At the feed end of the machine is a platform, O⁴, whereon the operator may stand for convenience in feeding.

O⁵ designates a belt-wheel on the driving-shaft, whereby power may be applied.

O⁶ designates a crank-arm attached to wheel O³ as an alternative for said belt-wheel.

C represents the hopper through which the ears are fed to the shelling-disks, and D D' represent arms which are pivoted at or near their middle portions to a casting, D', which

is attached to the hopper, or may be attached to a proper part of the frame, their location being such that they hold the ears against the shelling-disks. The lower end of each arm is formed of a long piece of wood, d, clad with metal, as at D'', on its inner face, and the upper part, D''', which is a casting secured to the wooden piece, has bearing against it a spring, E, which encircles a screw-bolt, F, secured to the casting D', said bolt passing through the arm and having fitted to it a nut, G, whereby the pressure of said spring may be adjusted, thus adjusting the pressure of the arm on the ear of corn.

Below the disk B is a floor, H, in the center of which is a longitudinal throat, J, the sides of said floor inclining downwardly and inwardly to said throat; and below the floor is a sieve, K, said floor and sieve being properly secured to the frame A.

Mounted on the frame at the end opposite to the hopper is an endless apron, L, which receives motion from the gearing O, O', O², and O³, employed to operate the shelling-disks.

It will be seen that when the ears of corn are fed to the hopper they are directed to the shelling-disks, being pressed thereagainst by the arms D. Should the shape or size of the ears require greater space to pass the arms D, the latter, owing to the springs E, are permitted to yield and permit the ears to reach the shelling-disks unobstructed, the pressure therein being always preserved. As soon as the ears clear the arms the latter assume their normal positions. When the corn is shelled, it drops to the floor H and escapes through the throat J thereof, falling on the sieve K, whence it is discharged in a cleaned condition, the dirt and refuse passing through the sieve, from which they may be directed into a basket, &c., or fall on the floor of the apartment, as desired.

The cobs are thrown along the floor H to the endless apron L by the revolution of the shelling-disks, and thus conveyed outside of the frame or casing A.

The sieve K consists of a perforated or open-work part, e, which constitutes the sieve proper, and allows dirt and refuse to fall through, and a terminal imperforate spout,

f, which discharges the clean corn at the side of the frame, where it can be most conveniently collected.

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

1. In a corn-sheller, a spring-pressed pivoted arm constructed of a piece of wood, metal-clad on its inner face, as at *D''*, and a casting, *D'*, having extension *D'''*, in combination with the shelling-disks and operating mechanism, substantially as set forth.

2. In a corn-sheller, a pivoted pressure-arm constructed of a piece of wood, metal-clad on its inner face, as at *D''*, and a casting, *D'*, having extension *D'''*, in combination with means for its adjustment, consisting of a spring, bolt, and nut, substantially as and for the purpose set forth.

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Witnesses:

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