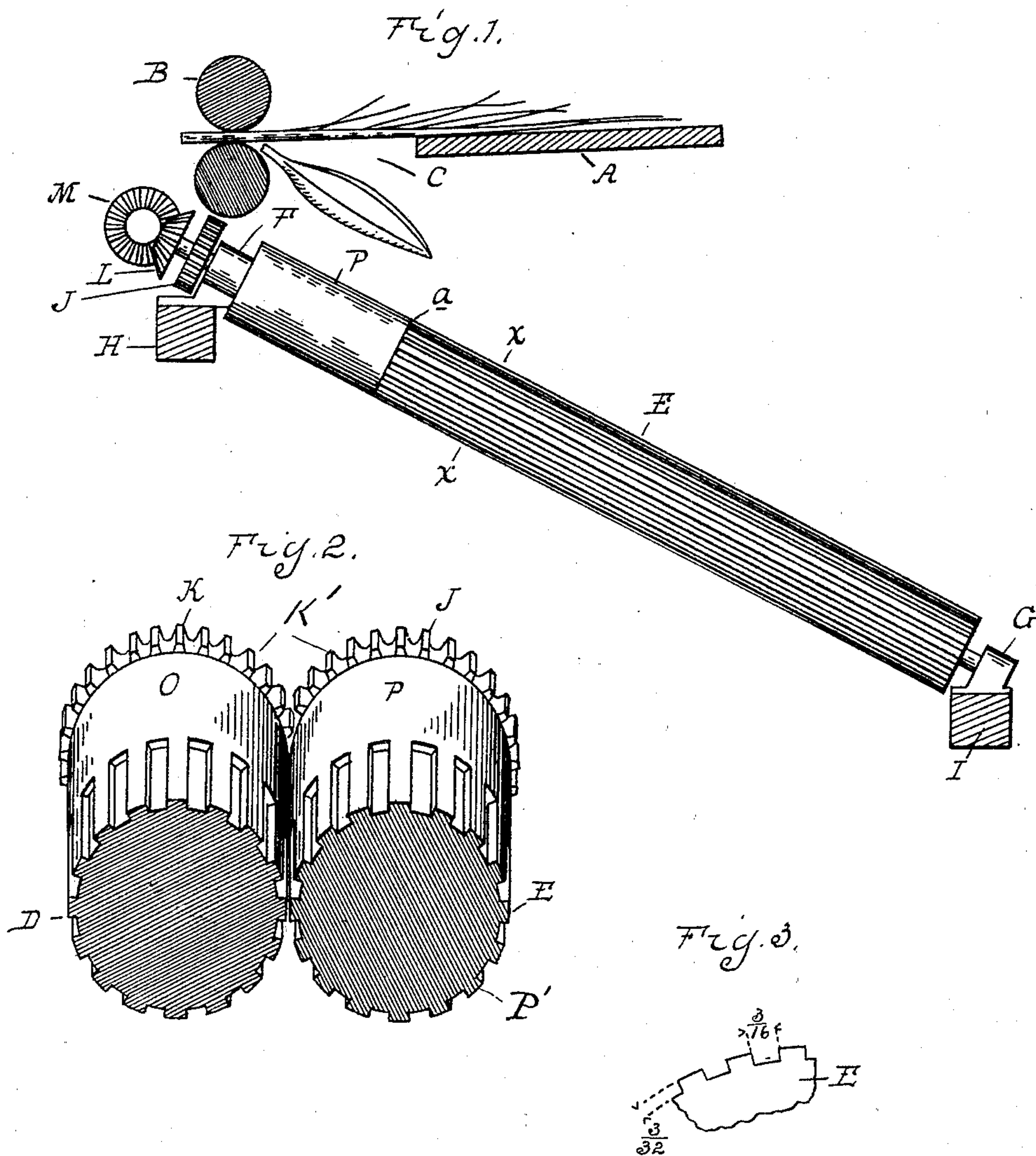


No. 719,658.

PATENTED FEB. 3, 1903.

T. GUEST.  
HUSKING ROLLERS.  
APPLICATION FILED MAR. 5, 1901.

NO MODEL.





# UNITED STATES PATENT OFFICE.

THOMAS GUEST, OF UNION, CANADA.

## HUSKING-ROLLERS.

SPECIFICATION forming part of Letters Patent No. 719,658, dated February 3, 1903.

Application filed March 5, 1901. Serial No. 49,824. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS GUEST, a subject of the King of Great Britain, residing at Union, in the county of Elgin and Province of Ontario, Canada, have invented certain new and useful Improvements in Husking-Rollers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention has reference generally to corn-husking machines, and relates particularly to the husking-rollers therefor; and the invention consists in the peculiar construction of the rolls, whereby the operation of husking may be speedily performed without the liability of danger of shelling the corn.

15 The invention further consists in the simple and novel means employed for straightening the ears as they are delivered upon the husking-rollers and guiding them to the bite of the rollers to insure the complete stripping of the husks.

20 The invention still further consists in other details of construction, as will be more fully hereinafter described.

25 In the drawings, Figure 1 is a sectional elevation of my improved husking-rollers, showing their relation to a suitable feed mechanism; and Fig. 2 is a section through the rollers, taken on line *xx*, Fig. 1. Fig. 3 is an elevation of a portion of one of the rolls full size.

30 As the invention has reference particularly to the husking-rollers, only parts of the machine in which they are adapted for use will be shown and generally described, as it forms no part of the present invention.

35 The reference-letter A designates a suitable platform or feed-plate adapted to receive the stalks, and B represents the feed-rolls through which the stalks pass. The feed-plate A, as shown, is separated from the feed-rolls a sufficient distance to form a feed-opening C, through which the ears after being detached from the stalks drop.

40 D and E designate the husking-rollers, inclined, as shown, and having their upper ends arranged directly beneath the feed-opening C. The rollers are journaled in bearings F and G at their ends, the bearings in turn being mounted upon cross-timbers H and I, the timbers forming a part of a suitable frame,

which is only partially shown. The rollers are connected by a gear mechanism K', consisting of intermeshing gear-wheels J and K upon the upper ends of the rollers, and the latter are rotated at equal speed by any suitable mechanism, preferably a bevel-pinion L, carried by the roller E, and a driven bevel-gear M, which meshes with the pinion, as indicated in Fig. 1. The rollers described are preferably cylindrical, a smooth cylindrical surface P being left upon each at its upper end for about the average length of a corn-ear, the two surfaces being adjacent and the remainder of the roller-surfaces to the lower ends being fluted or corrugated from the point *a*, leaving longitudinal ribs P' upon the two rollers equal in number and width, and the ribs being arranged to register, their relative positions being maintained by the connecting-gear K'. The adjoining smooth surfaces upon the rollers are immediately beneath the feed-opening C, and their function is to receive the ears as they drop through the opening, straighten the same into a longitudinal position, and guide them to the bite of the rollers. This is readily accomplished, as the ears alighting upon the smooth surfaces naturally assume a position longitudinal to the rollers.

By constructing the rollers in the manner set forth it has been found in practice that the ears as they are delivered to the stripping-ribs from the smooth adjoining surfaces are stripped of their husks by the abutting ribs, but the latter in no way injure or loosen the kernels.

45 The operation of the rollers is well known and requires no explanation any further than the operation of the means employed for automatically straightening and guiding the ears, which has been already set forth. It will be obvious from the description of the invention that the straightening and guiding mechanism is of very simple construction, and in practice it has been demonstrated that the mechanism is equally effective. Attention is also drawn to the fact that by corrugating the rollers in the manner set forth the ears are enabled to be fed over the smooth guiding-surfaces to the ribs in such manner that there is no danger of the ears being sud-



denly stripped and the kernels loosened thereby.

What I claim as my invention is—

1. The combination of two parallel and oppositely-rotating husking-rollers, having at one end adjacent smooth surfaces adapted to receive and guide the ears, and provided each with a series of longitudinally-extending ribs, and means for depositing the ears upon the smooth surfaces of said rollers.

2. The combination of two parallel, inclined, and oppositely-rotating husking-rollers having adjacent smooth cylindrical surfaces at their upper ends adapted to receive and guide the ears, and coacting ribs extending longitudinally from the smooth surfaces to the lower roll ends.

3. The combination of two cylindrical husking-rollers arranged in parallel alignment and contacting, the adjoining cylindrical surfaces of the rollers at one end being intact for a distance equal to the average length of a corn-ear, and the remainder of the cylindrical surface of each roller being corrugated leaving longitudinally-extending stripping-ribs, the ribs in one roller corresponding in number and width and registering with the ribs upon the complementary roller, means for driving the rollers in opposite directions, and means for maintaining the relative positions of the

stripping-ribs during the rotation of the rollers.

4. The combination of two parallelly-arranged and oppositely-driven husking-rollers provided each with a series of longitudinally-extending rigid gripping-ribs, the outer faces or crowns of the ribs being substantially flat and of equal width, and the ribs in the two series being adapted upon the rotation of the rollers to register and the rib-crowns to abut, and means for maintaining the relative positions of the gripping-ribs during the rotation of said rollers.

5. The combination of two parallel and oppositely-rotating husking-rollers, each having at one end a smooth guiding-surface extending around the roller and projecting longitudinally thereof a distance equal to the average length of a corn-ear, the said rollers being arranged with the smooth surfaces adjoining, and a series of longitudinal stripping-ribs upon each roller leading from the guiding-surfaces.

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

THOMAS GUEST.

Witnesses:

H. H. EVELY,  
WM. MCLAIN.