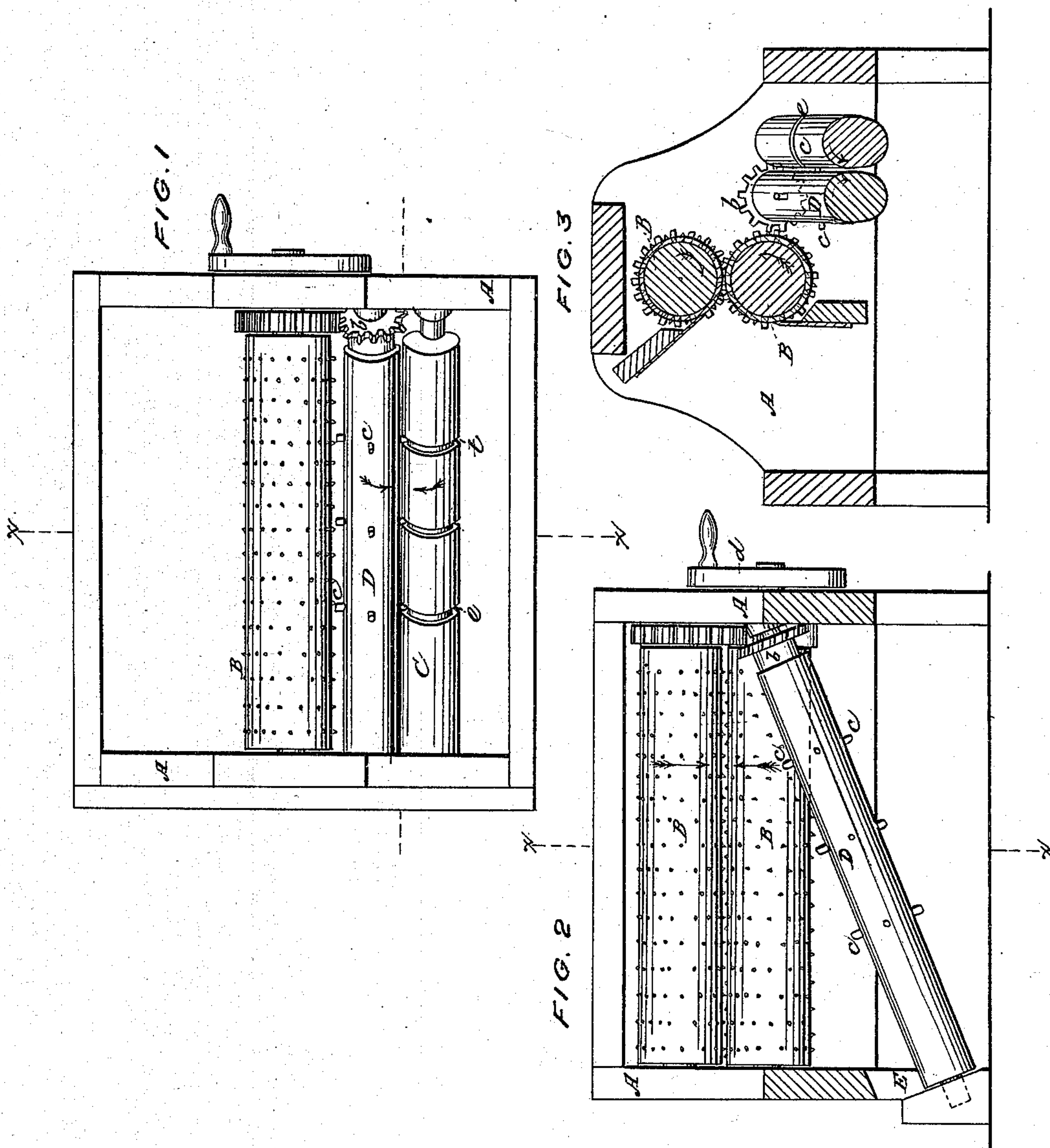


T. A. BURGESS.

Corn Husker.

No. 104,693.

Patented June 28, 1870.



WITNESSES:

Fred. Haynes
R. L. Hareau

INVENTOR:

Thomas J. Burgess

United States Patent Office.

THOMAS J. BURGESS, OF RONDOUT, NEW YORK.

Letters Patent No. 104,693, dated June 28, 1870.

IMPROVEMENT IN CORN-HUSKING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS J. BURGESS, of Rondout, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Corn-husking Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, and in which—

Figure 1 is a plan view of a corn-husking machine, constructed according to my invention.

Figure 2 is an end view and a partial section of the same.

Figure 3 is a vertical transverse section of the same, taken in the line *x* of figs. 1 and 2.

The object of this invention is to provide a cheap, simple, and efficient machine for removing the husks, &c., from ears of corn without the use of the India-rubber rolls commonly employed in machinery for such purpose.

It consists in the combination of two cylinders, having roughened or toothed surfaces with each other and with the supporting frame-work of a corn-husking machine in such manner that the said cylinders are caused to tear and remove from the ears the husks surrounding the same when such ears are properly presented to the rolls.

The invention further consists in the combination with the parts just specified of two supplemental rolls, one furnished with circumferential series of radial teeth, and the other with peripheral grooves, by which, after the removal of the husks, the silk may be effectually detached from the ears, thereby bringing them into a perfectly clean condition.

The invention further consists in arranging the supplemental rollers in such relation with the toothed or roughened husking-cylinder, and with an opening in the side of the frame that the ears deprived of their husks and silk may fall from the husking-cylinder onto the delivery-rollers, with their longitudinal axes parallel with the axes of said rollers, and be automatically delivered from the apparatus.

To enable others to understand the construction and operation of my invention, I will proceed to describe it with reference to the drawing.

A represents the main or supporting-frame of the machine, provided with suitable bearings, which receive the journals of the two cylinders, B, arranged one above the other.

These cylinders are geared together by spur-wheels, as shown in figs. 1 and 2. One of them has a crank, *a*, on one end of its shaft, so that, by turning this crank, a rotary motion may be given to both cylinders in the direction indicated by the arrows in fig. 2.

The external portions of these cylinders may be of sheet metal, and short teeth or projections, giving rasped or roughened surfaces, are formed thereon, preferably by punching or indenting the sheet metal from the inner side. Also, supported in bearings or journal-boxes in the frame A, are two supplemental rollers, C D, placed parallel with each other, but each with one end lower than the other, so that the two are brought into an oblique position with reference to the cylinders B. One of these, D, is provided with a skew-gear, *b*, which gears into the spur-wheel of one of the cylinders, B, and is provided with several circumferential series of short radial teeth, *c*. The other roller, C has a groove, *e*, formed in it opposite each of the series of teeth *c*, on the roller D, as will be seen by reference to fig. 1. Formed in the side of the frame, at and over the lower ends of the rollers C D, is an outlet-opening, E.

In using the machine the cylinders B are rotated either by the crank *a*, or by a band-pulley substituted in its place, and the unhusked corn is placed in the cavity formed between the forward sides of the cylinder, and in contact with the same.

The rasping and tearing action of the roughened surfaces of the cylinders quickly detaches the husks, and carries the latter between the cylinders and away from the ear; this being done the ear is dropped upon the supplemental rollers C D, which, from their structure, previously herein set forth, catch the silk from the ear, and, carrying it downward between them, discharge it underneath the machine. The ears thus freed from extraneous material move gradually downward in the hollow between the two inclined rollers, and, reaching the lower ends of the latter, pass out through the opening E.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The inclined arrangement of the rollers C D with reference to the parallel and horizontal position of the rasping or roughened cylinders B, and the opening E, in the frame A, whereby the ears, after leaving the cylinders, and being deprived of husks and silk, are caused to fall parallel with the axes of said rollers, and move automatically along them to the discharge-opening, substantially as herein shown and described.

2. The combination of the rollers D, furnished with circumferential series of teeth, the roller C, having peripheral grooves, the two roughened or rasping cylinders B, and the frame A, substantially as and for the purpose herein set forth.

THOMAS J. BURGESS.

Witnesses:

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HENRY PALMER.