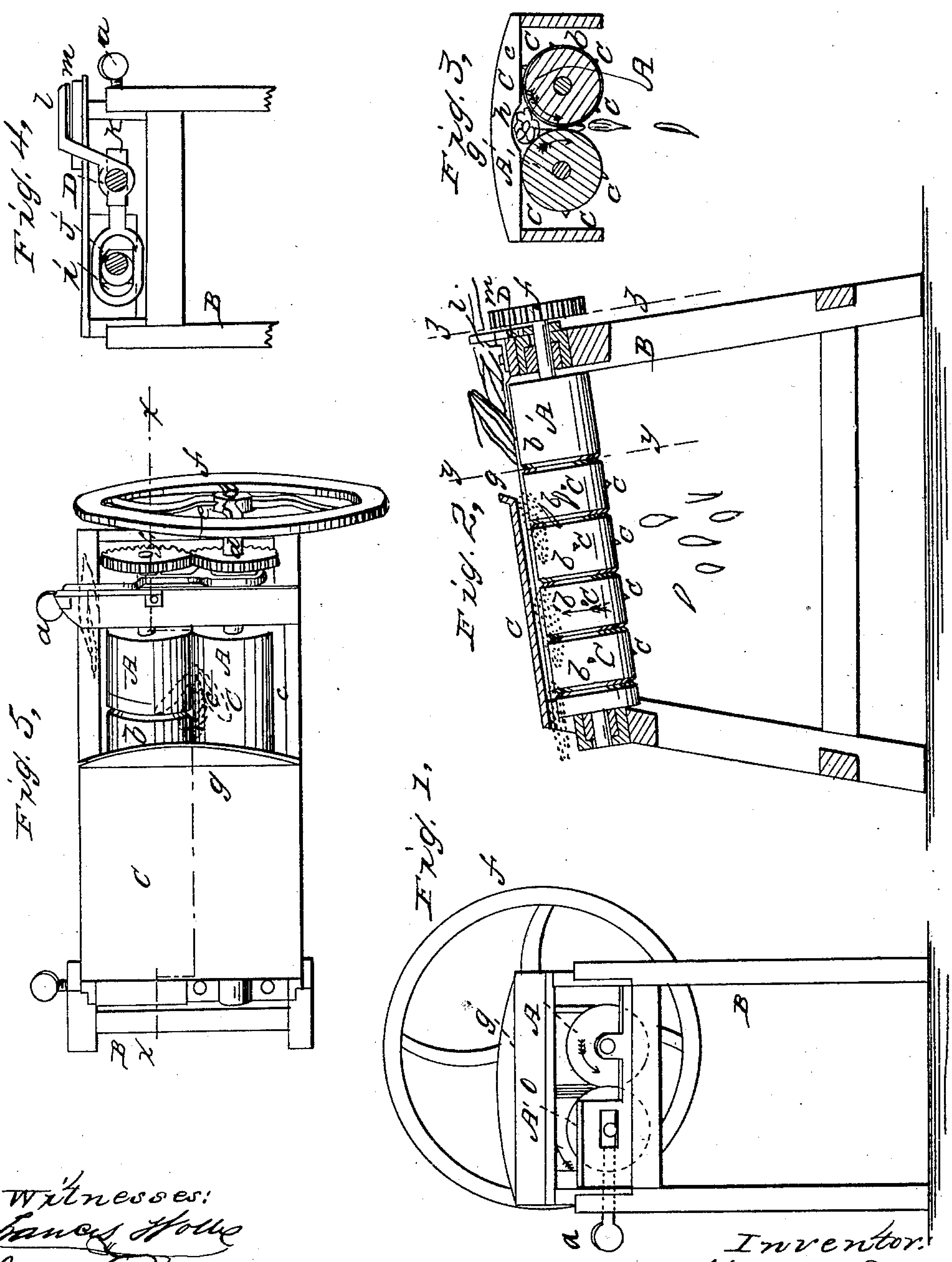
H. A. DOSTER.

Corn Husker.

No. 23,295. Patented March 22, 1859.



Witnesses:

Inventor:
Herman A. Doster

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HERMAN A. DOSTER, OF BETHLEHEM, PENNSYLVANIA.

CORN-HUSKER.

Specification of Letters Patent No. 23,295, dated March 22, 1859.

To all whom it may concern:

Be it known that I, HERMAN A. DOSTER, of Bethlehem, in the county of Northampton and State of Pennsylvania, have invented a new and useful Improvement in Machines for Husking Corn; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is an end view of my invention. Fig. 2, is a side sectional view of ditto, taken in the line *x*, *x* Fig. 5. Fig. 3, is a transverse section of ditto, taken in the line *y*, *y*, Fig. 2. Fig. 4, is a transverse section of ditto, taken in the line *z*, *z* Fig. 2. Fig. 5, is a plan or top view of ditto.

Similar letters of reference indicate corresponding parts in the several figures.

To enable others skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, A[1], represent two rollers, which are placed, in a somewhat inclined position from a horizontal plane, on the upper part of a frame B. The rollers A, A[1], are placed side by side, and the roller A[1], has its journals fitted in adjustable or yielding bearings which are regulated by set screws *a*[1], for the purpose of allowing it to yield when necessary. The rollers A, A[1], are grooved circumferentially, as shown at *b*, and are also armed with teeth *c*, which are driven into the rollers in rings or circles which are at right angles with the axes of the rollers, the teeth of one roller being in line with the grooves of the other, and vice-versa. This arrangement of the teeth and grooves of the rollers is precisely the same as in the original patented machine previously alluded to. On the upper end of the shaft or journal *d*, of the roller A, a toothed wheel *e*, is placed. This wheel gears into a corresponding wheel *f*, on the shaft or journal of the roller A, and a fly wheel *f*[1], is attached to the journal *d*.

On the upper part of the frame B, a board C, is secured. This board extends entirely across the machine, and is equal in length to about two-thirds of the length of the rollers A, A[1]. The upper end of the board has an inclined ledge or flanch *g*, attached to it, said ledge or flanch projecting somewhat above the upper surface of the board. The under side of the board C, is grooved longitudinally at its center as shown at *h*, see Fig. 3, said groove extending the whole length of the board and being directly over the point of junction of the two rollers, or the "bite" as it is frequently termed.

On the shaft or journal *d*, of the roller A, an eccentric or cam *i*, is placed. This eccentric or cam works within a yoke *j*, which is attached to a lever D, said lever being secured to the shaft of the roller A[1]. To the opposite end of the lever D, a knife blade *l*, is attached, and to the frame B, immediately below the blade *l*, a leger blade *m*, is secured, see more particularly Fig. 4.

When the wheel *f*[1] is rotated, the two rollers A, A[1], will be rotated in opposite directions, as indicated by the arrows 1, the gearing *e*, *f*, connecting the two rollers. The knife blade *l*, will also be moved up and down through the medium of the eccentric or cam *i*, yoke *j*, and lever D, the blade *l*, working over the edge of the leger blade *m*. The operator or attendant grasps one ear of corn at a time and inserts the butts between the blades *l*, *m;* the blade *l*, as it descends severs the butt from the ear and the ear is then dropped between the rollers A, A[1], the attendant placing the point of the ear just under the upper edge of the board C. The rollers as they rotate strip the husks from the ears, the teeth *c*, catching the husks and drawing them into the bite of the rollers while the ears are repelled by the rollers in consequence of the rollers being sufficiently small in diameter to form a "bite" having an obtuse angle, so that the ears instead of being caught by the rollers and drawn between them and crushed, will, as before stated, be repelled. The denuded ears pass down by their own gravity between the board C, and the "bite" of the rollers, the groove *h*, affording sufficient space for the ears to descend freely and discharge themselves from the depressed ends of the rollers.

The operation of the rollers is precisely the same as in the machine formerly patented and hereinbefore mentioned, but the board C, and the position of the rollers, as herein shown, facilitate in a remarkable degree the feeding of the ears of corn to the machine, the board C, covers a large portion of the rollers and the ears may be dropped by the attendant in the proper place between the rollers without subjecting him to any danger, as is the case with the machine

formerly patented, in which the ears require to be presented directly to the rollers by hand until caught by the teeth.

The guard board C, not only serves to protect the hands of the operator, but also prevents the ears of corn from raising themselves from the proper position in the bite of the rollers, a contingency which would be likely to occur without the guard board when the length of the husks exceeds that of the ears.

The larger the size of the ears of corn the farther apart should the rollers A, A^1, be adjusted, and vice versa; and the larger the ear the greater should be the length of arm between the fulcrum of the lever D, and its operating cam (*i*), and vice versa. The adjustment of the rollers A A^1 and lever D, is simultaneously done in my machine by simply turning the screw (*a*). If large ears are to be husked the screw (*a*) is withdrawn and the rollers A, A^1, separated; and this separation causes the cam (*i*) to act further toward the extremity of the yoke (*j*), or at a greater distance from the fulcrum (*k*). My improved combination of the lever D, with the adjustable roller A^1 enables me to cut large ears as easily as small ones and renders the adjustment of both knife and roller simultaneous.

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

The arrangement and combination of the lever D, with the adjustable roller A^1; so that when the roller A^1, is adjusted, the distance between the cam (*i*) and the fulcrum of the lever D, will be correspondently changed, as and for the purpose herein shown and described.

HERMAN A. DOSTER.

Witnesses:

FRANCIS WOLLE,

JAMES T. BORHEK.