

(No Model.)

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J. WEBBER, Jr.

CORN HUSKER.

Nº. 258,176.

Patented May 16, 1882.

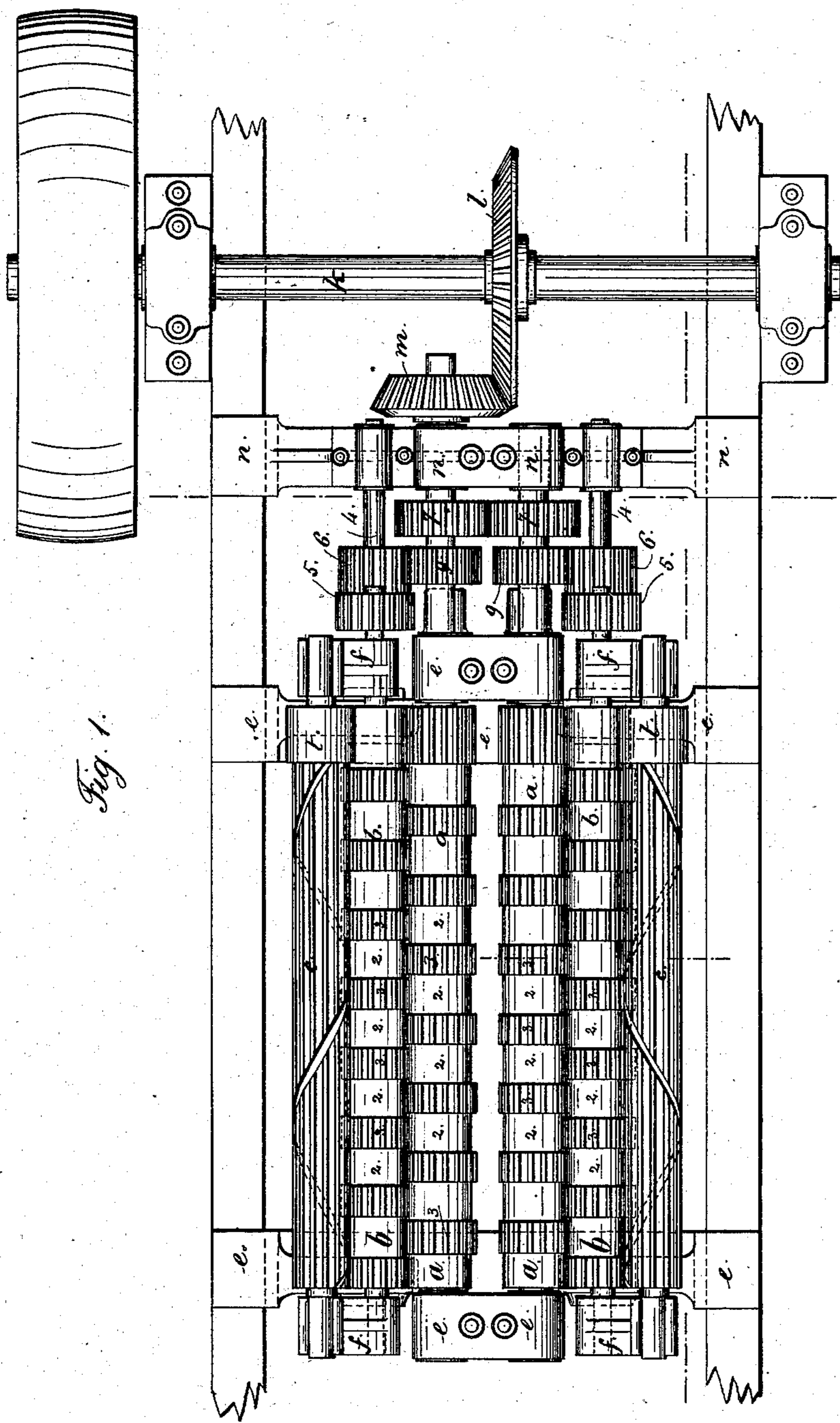


Fig. 1.

Witnesses

Harold Ferrell
J. A. A. A.

Inventor
Josiah Webber Jr.
per Lemuel W. Ferrell

(No Model.)

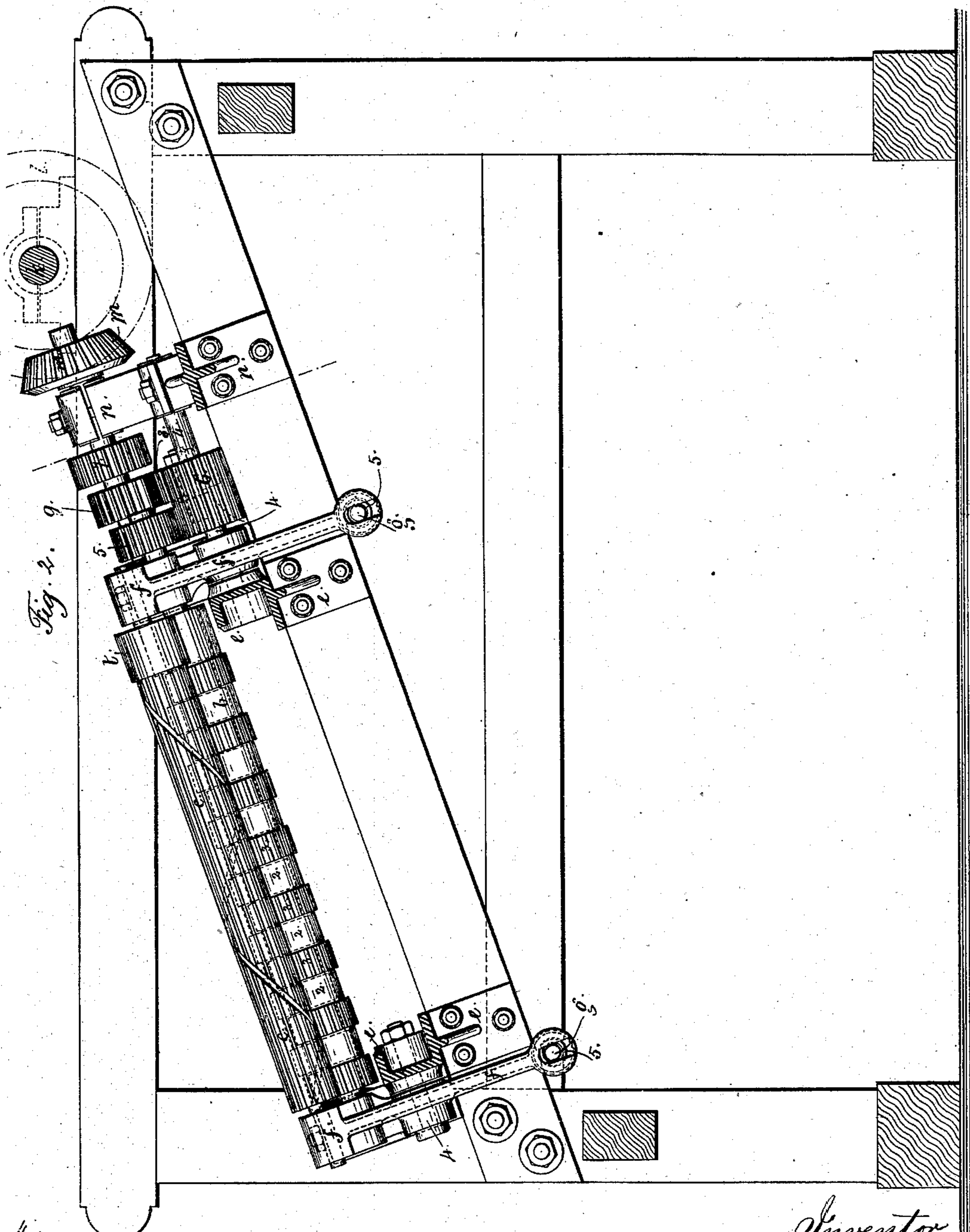
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Witnesses—
Harold Terrell—
J. Gail

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Lemuel W. Serrell atty.

(No Model.)

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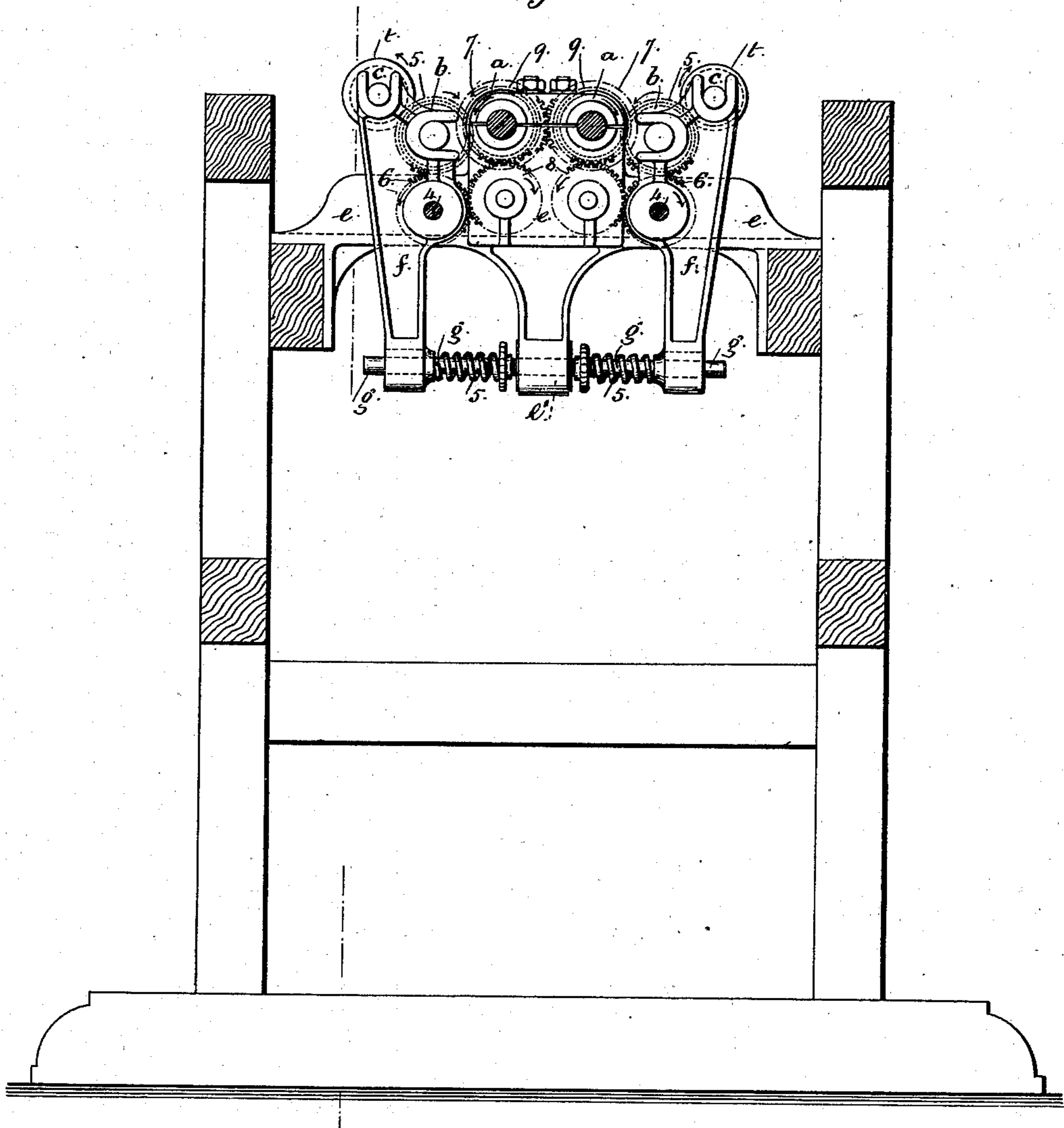
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Fig. 3.



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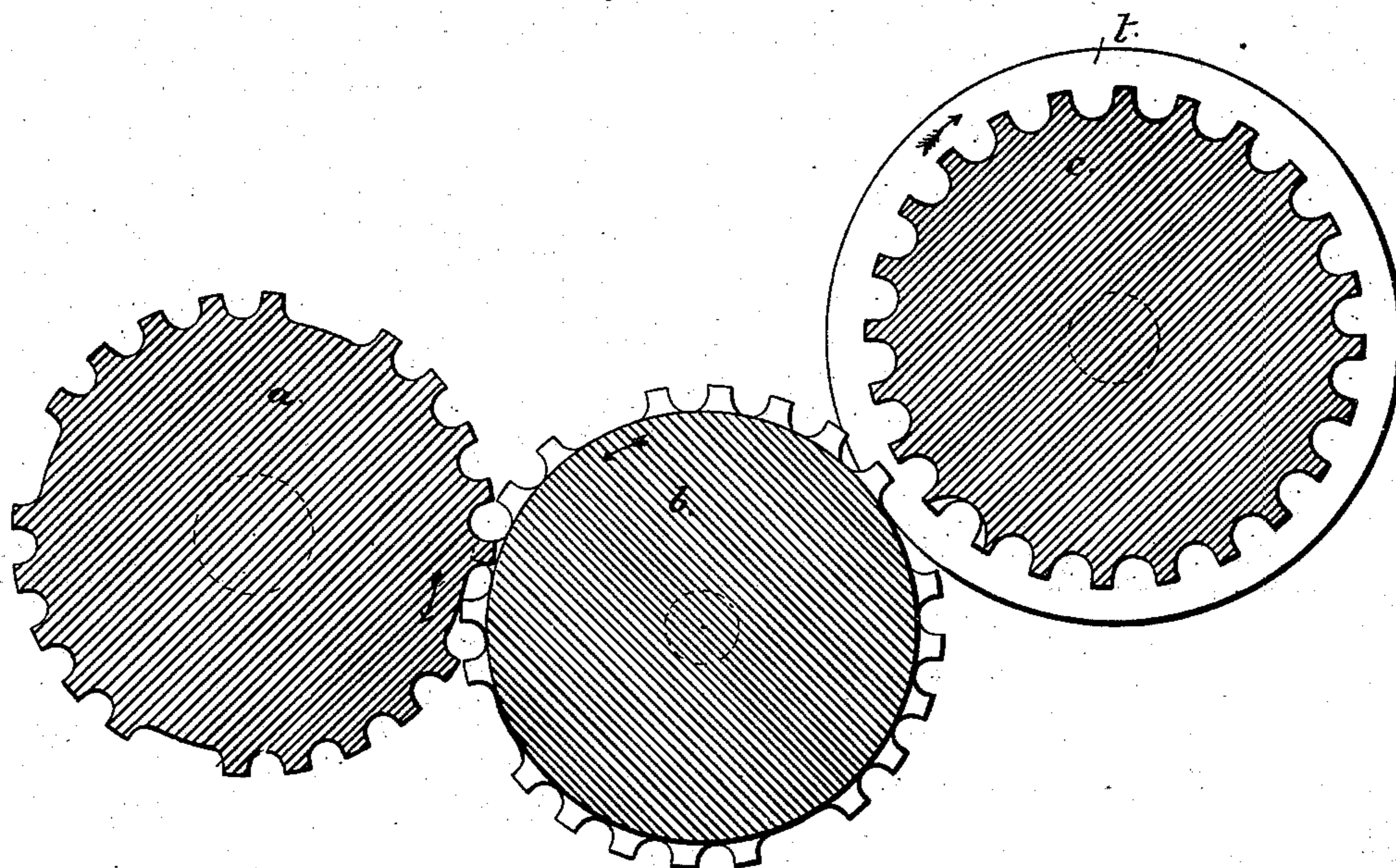
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Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSIAH WEBBER, JR., OF BROOKLYN, ASSIGNOR TO THE CHAMPION CORN HUSKER COMPANY, OF NEW YORK, N. Y.

CORN-HUSKER.

SPECIFICATION forming part of Letters Patent No. 258,176, dated May 16, 1882.

Application filed June 20, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH WEBBER, JR., of Brooklyn, in the State of New York, have invented an Improvement in Corn-Huskers, of which the following is a specification.

Corn-huskers have been made with pairs of inclined rollers, down which the ears of corn slide, and which rollers pull off the husks. Difficulty has been experienced in obtaining rollers that are adapted to catch hold of the husks, and rubber blocks have been used in the rollers; also metal rollers with grooved surfaces. The rubber is liable to wear out, and the grooved surfaces become clogged and inoperative, especially in cases where the husks wind around the rollers and separate them.

I make use of rollers with alternate plain and toothed sections or surfaces, the toothed surfaces or sections being larger in diameter than the plain sections, and the toothed sections of one roller come against the plain sections of the other roller, so that the projecting ends of the teeth-sections loosen up the husks and pull them off; at the same time the roughness is not sufficient to shell the corn. I also make use of grooved regulating-rollers, that act to insure uniformity of movement in the ears of corn as they pass down the inclined rollers.

In the drawings, Figure 1 is a plan view of the rollers in a plane parallel to their axis. Fig. 2 is an elevation, partially in section, of the husking-rollers, the frames, and gearing. Fig. 3 is an elevation of the upper end frame and lever-bearings, and Fig. 4 is a section in larger size of the husking and regulating rollers.

The rollers *a* and *b* are used in pairs and placed at an inclination, as usual, so that the ears of corn will run down the same. Each roller is made with alternate plain surfaces 2 and toothed surfaces 3, the toothed portions being about a quarter of an inch larger in diameter than the plain portions, and the plain portions are the longest, so that when the rollers are placed together in pairs, with the toothed sections opposite to the plain sections, the teeth will not touch at their ends. Hence the teeth will not act to either cut the husks

or press the particles into the grooves between the teeth, and the teeth will remain sufficiently free and clean to be operative. These teeth are preferably provided with semicircular intervening grooves, so that the husks will not become wedged between the teeth, and there will be sharp edges to the teeth, and it is preferable to omit about four teeth around each section, as seen in Fig. 4, so that the ear will be partially dropped into the space and the husk be caught more easily.

The regulating-rollers *c c* are grooved spirally and placed slightly above the rollers *a b*, and all three rollers are revolved by gearing or friction in the directions indicated by the arrows, and the husking operation is performed by the action of the rollers *a b*, as before indicated, and the rollers *c*, with their spirally-grooved surfaces, cause the ears to move along the rollers from their upper to their lower ends with reasonable uniformity of speed, for the screw-formed surfaces serve to lessen the speed of the ears that are moving too fast, and to move along any ears that may be caught or obstructed. These rollers *c* are also, by preference, fluted, as shown.

The cross-frames *e* have stationary bearings for the journals of the rollers *a a*, and they also receive the pivots or shafts 4 of the lever-bearings *f*, which lever-bearings support the journals of the rollers *b* and *c*. There are projections *e'* upon the frames *e*, through which pass the rods *g*, around which are helical springs 5, acting against the forked lower ends of the lever-bearings *f*. These allow the rollers *b c* to move away from the rollers *a* for the passage of husks, and they close rapidly and with but little friction.

The power to rotate the husking-rolls is applied to the shaft *k*, and upon this is a bevel-wheel, *l*, gearing to a pinion, *m*, at the end of the shaft of one of the rollers *a*. *n* is a cross-bearer, with journal-boxes for the outer ends of the shafts of the rollers *a*, and also for the pivot-shafts 4 at the upper end of the rollers. These shafts 4 are also adapted to receive and support the gear-wheels 6 of the train of gear-wheels that communicate motion to the respective rolls, the rollers *a a* being geared to-

gether by the wheels 7 7, and these give motion through the wheels 8, 6, and 5 to the shafts of the rolls *b b*.

It will be apparent that the ears of corn, as they slide down upon the inclined rolls, are caused to revolve by the action of the rolls *a*, *b*, and *c*, and the husks are stripped off by the rolls *a b* by the action of the teeth, and the husks pass through the rolls and are delivered below the rollers, and the ears slide down and off the lower ends of the rolls. The regulating-rollers *c* are represented as rotated by the frictional contact of the end portions, *t*, against the smooth surfaces of the rollers *b*, near the upper ends; but they may be driven by gear-

I claim as my invention—

1. In a corn-husking machine, a roller having sections that are plain and intermediate sections that are larger and grooved longitudinally to form teeth, in combination with a second roller having similar toothed and plain sections, the plain sections being longer than

the toothed sections, and the rollers placed together so that the toothed sections in one roller pass in between the toothed sections of the other roller and are adjacent to the plain sections, substantially as specified.

2. The combination, with a pair of husking-rolls, of a regulating-roller, *c*, grooved spirally, for the purposes and substantially as set forth.

3. In combination with the pairs of husking-rollers and grooved regulating-rollers, the lever-bearings *f* and the helical springs 5, acting against the lower end, substantially as set forth.

4. The combination, with the husking-rollers *a b* and regulating-rollers *c*, of the bearers *e*, *f*, and *n* and gear-wheels *l m 7 9 8 6 5*, substantially as and for the purposes set forth.

Signed by me this 7th day of June, A. D. 1881.

JOSIAH WEBBER, JR.

Witnesses:

HAROLD SERRELL,
WILLIAM G. MOTT.