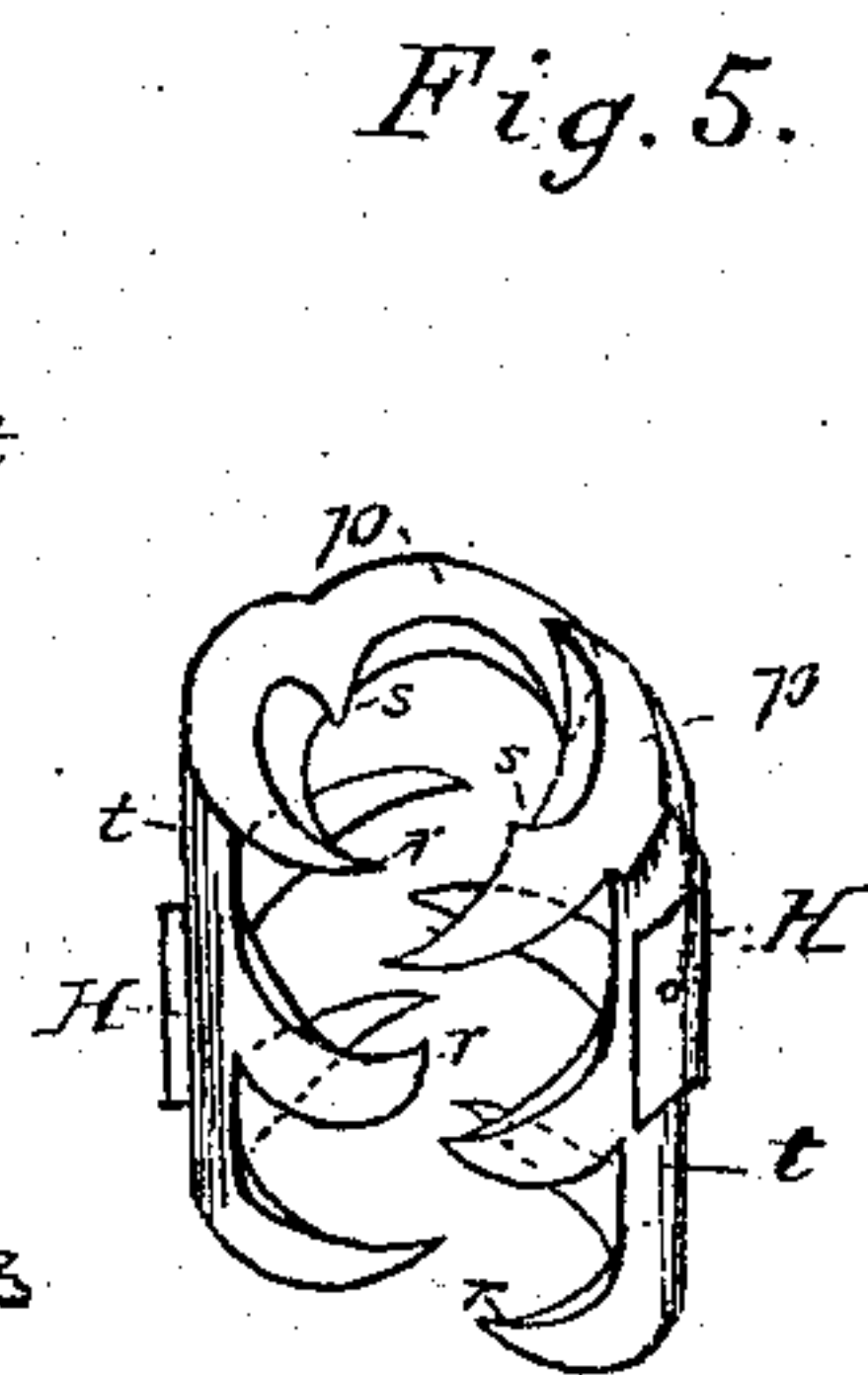
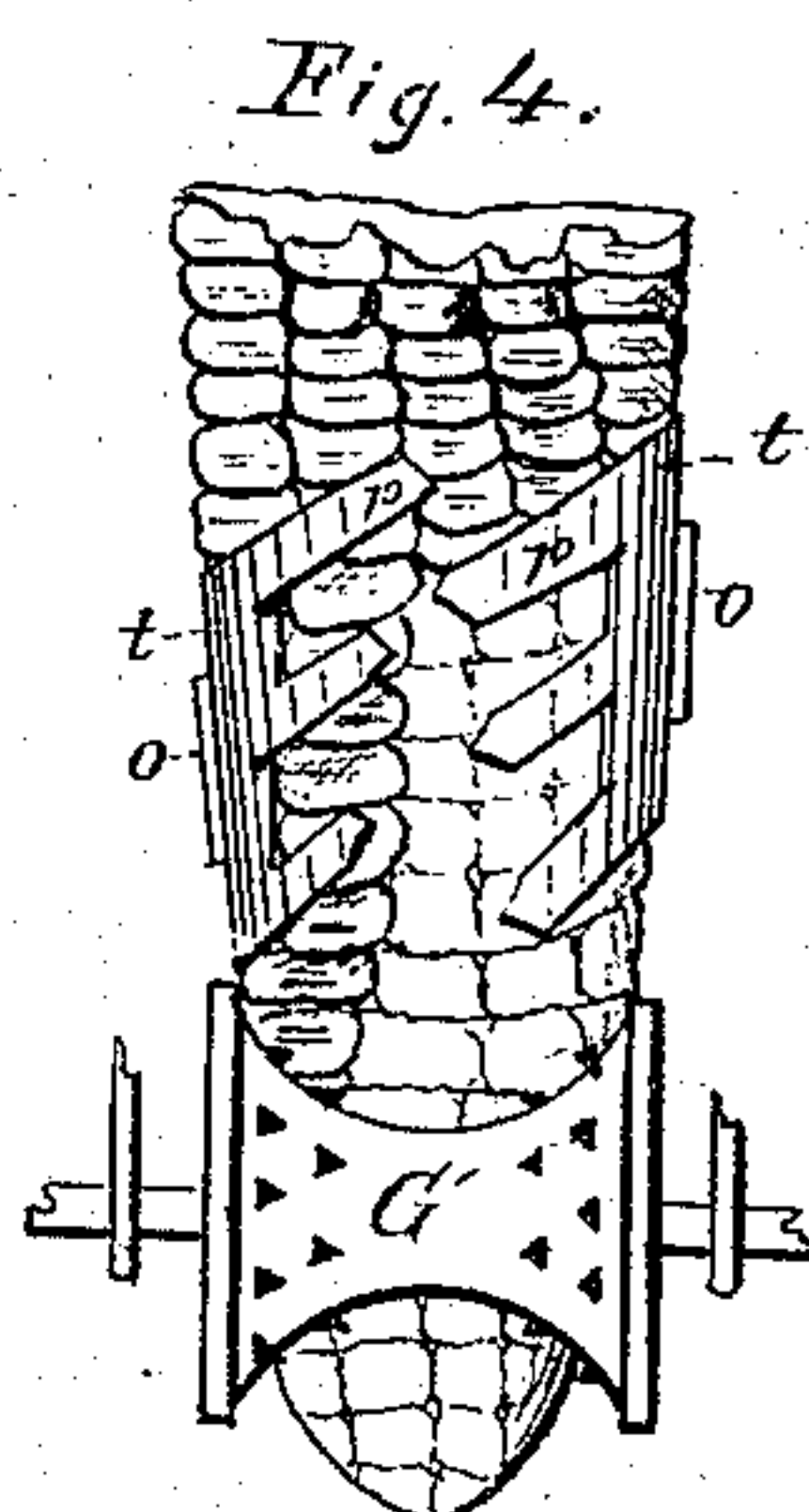
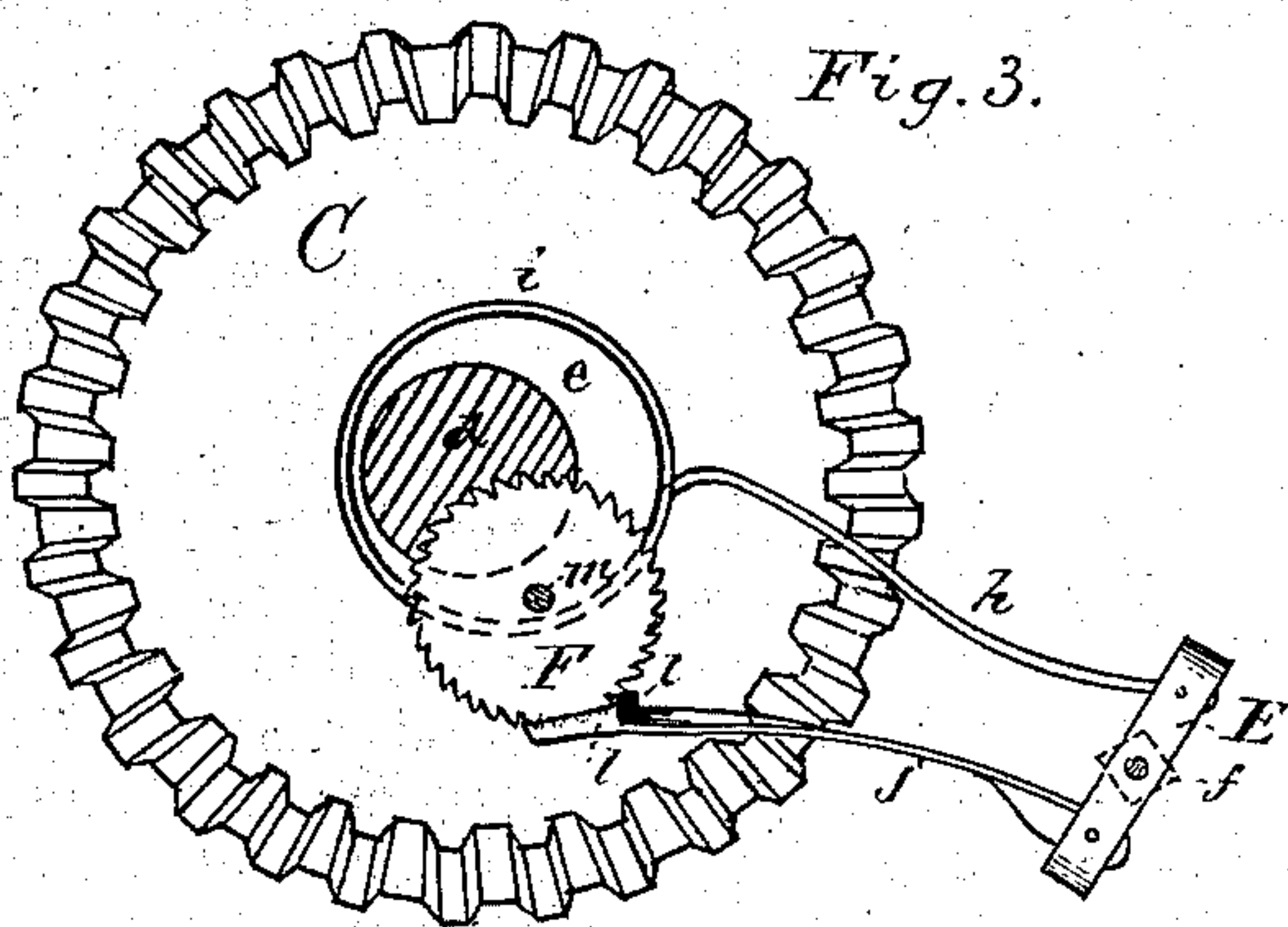
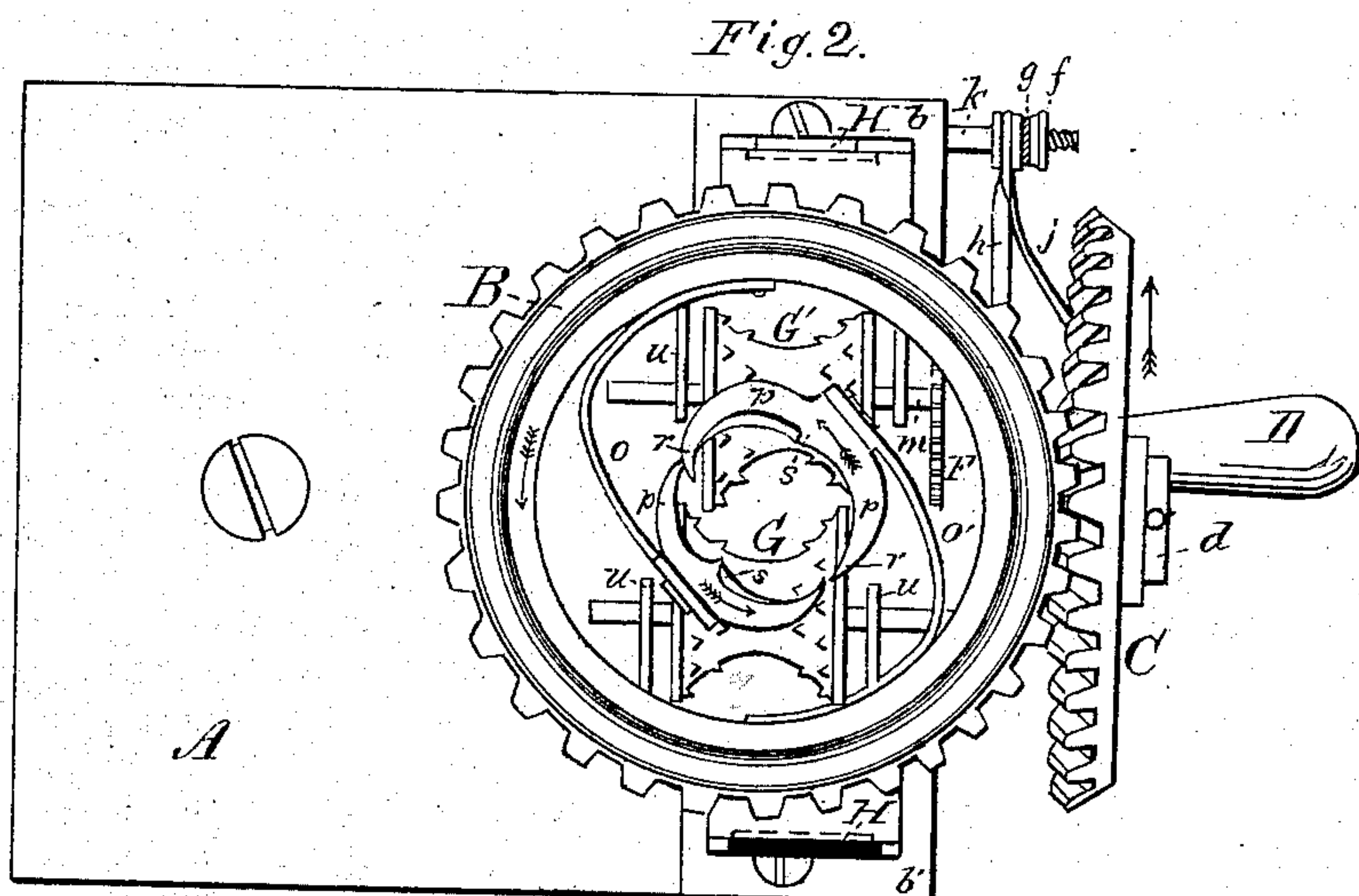
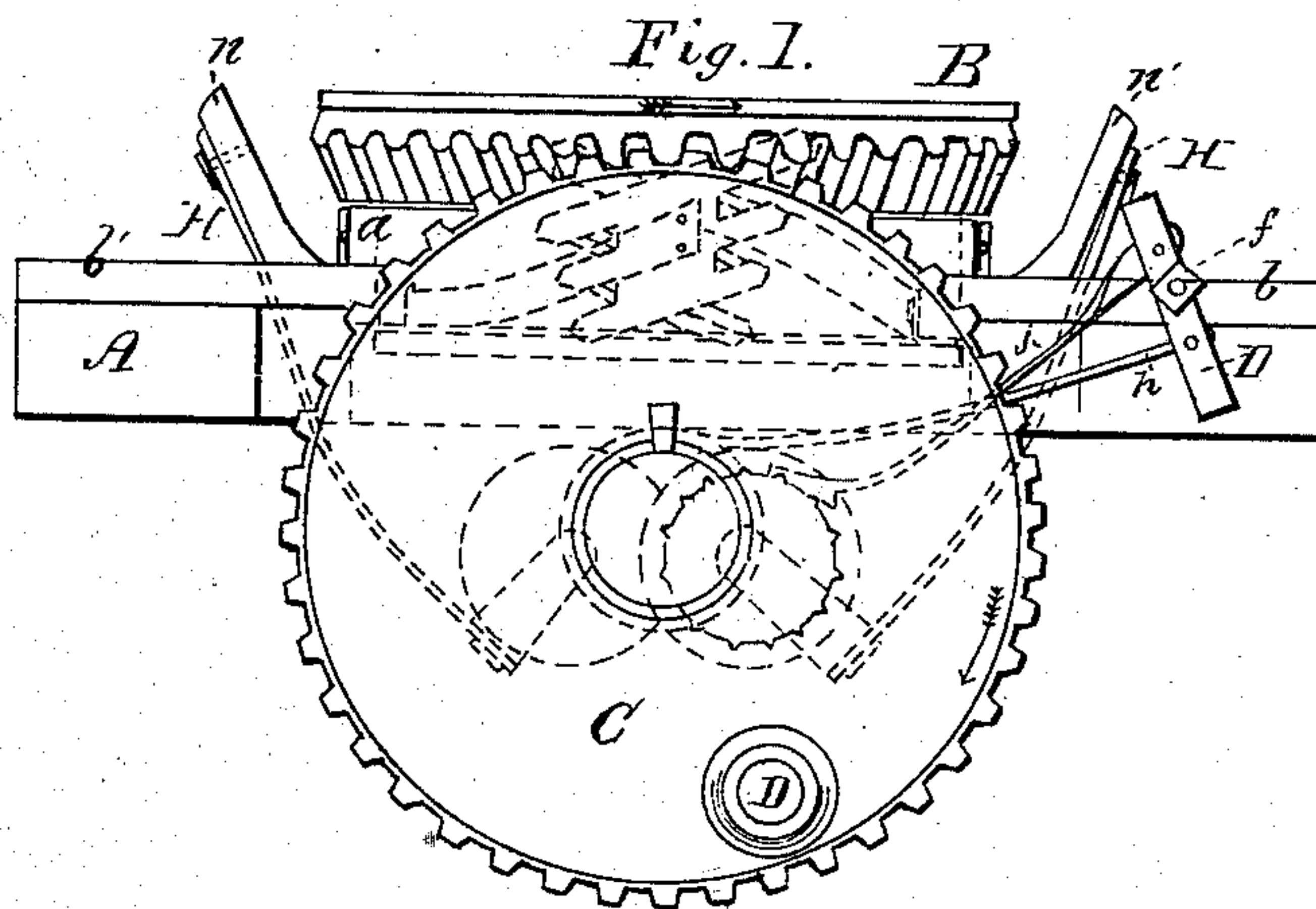


J. N. WOLFE.  
Corn-Shellers.

No. 158,816.

Patented Jan. 19, 1875.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JOHN N. WOLFE, OF LANCASTER, OHIO.

## IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. 158,816, dated January 19, 1875; application filed December 12, 1874.

*To all whom it may concern:*

Be it known that I, JOHN N. WOLFE, of Lancaster, in the county of Fairfield and State of Ohio, have invented certain new and useful Improvements in Hand Corn-Shellers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings represents a side elevation of my invention; Fig. 2, a plan view of the same; Fig. 3, a view of the under side of that part of the mechanism which operates the feed-rollers; Fig. 4, a detached and perspective view of the sheller-blades and one of the feed or discharge rollers, and position of the cob; Fig. 5, a perspective view of the sheller-blades.

This invention has relation to that class of hand corn-shellers in which are employed yielding sheller-blades in connection with feed or discharge rollers.

My invention consists in the peculiar construction of the sheller-blades; also, in a mechanism for operating the feed or discharge rollers, to insure their action upon the cob after passing the sheller-blades, such mechanism consisting of a rocking shaft or vibrating arm, which receives its motion from a connecting-rod and eccentric upon the face of the driving-wheel, and a pawl pivoted to the vibrating arm, and working in the teeth of a ratchet-wheel rigidly secured to the shaft of one of the feed-rollers; also, in the manner of hanging such rollers, so that they will be allowed a lateral motion, as will hereinafter more fully described.

A, in the drawing, represents a table or bed of any suitable material, to which the operating parts of my corn-sheller are secured, and may be provided with means of attachment to a wall or table, as desired. This table or bed A has an opening, into which fits a bearing-ring, *a*, provided with plates *b b'*, for securing it to the bed or table, and has a downwardly-projecting arm provided with a short shaft, *d*, upon which a beveled gear-wheel, C, works.

This wheel C is provided with the usual handle D, and has formed upon its inner face an eccentric, *e*. A rocking shaft or vibrating arm, E, is connected to a rod projecting from the end of the table or bed A, and is held thereon by a screw-nut and packing, *f g*. To one end of this rocking shaft or vibrating arm E is pivoted an arm, *h*, terminating in a ring, *i*, of sufficient size to pass over and around the eccentric *e*. To the other end of the rocking shaft or vibrating arm E is pivoted a pawl, *j*, having guides *l l'*, for the purpose of keeping the ratchet-wheel F in place thereon. This ratchet-wheel F is rigidly connected to one of the feed-rollers, G'. The feed or discharge rollers G G' work in bearings upon side-plates *u u'*, connected to the spring-arms H H', these arms being pivoted to inclined projecting bars *n n'* upon the blades *b b'*, which admit of their having a lateral motion to adapt them to any size cob. Upon the inside of the bevel-gear wheel B are secured curved spring-arms *o o'*, carrying shelling knives or blades *p p'* of crescent shape, the blades *p p'* terminating at a point, *r*, and having an intermediate knife-blade, *s*, for cutting off the smaller grains of corn from the end of the ear when first introduced into the machine. These blades are secured to or form a part of bars *t t'*, and are arranged at an angle, or inclined sufficiently to bring the point *r* between the two opposite blades. This form of blade acts upon the cob like a screw, drawing it down until it comes in contact with the feed or discharge rollers.

The operation of my machine is as follows: The corn to be shelled is introduced from the top of the machine between the sheller-blades *p p'*, at the same time turning the bevel-gear wheel C, imparting a rotary motion to the blades, which carry the cob down until it has reached the feed or discharge rollers G G', when they catch the cob, and, by means of the sharp points on the rollers, keep the cob from turning, but allow it to descend. These rollers, by means of the springs H H' and their pivoted connection to the inclined arms *n n'*, accommodate themselves to any size of cob. To insure the working of the feed or discharge rollers at all times, the pawl *j* catches in the teeth upon the periphery of the ratchet-wheel *f*, and forces it around, motion being given to



the said pawl through an eccentric, *e*, upon the face of the wheel C in connection with a vibrating bar or lever.

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

1. The combination, with the sheller-blades *p p'*, when constructed substantially as described, of the feed or discharge rollers G G', carried upon the curved spring-arms H H', said spring-arms being pivoted on the projecting inclined arms *n n'*, for the purpose of allowing the rollers a lateral as well as a yielding spring motion, to adjust them to any size of cob, substantially as set forth.

2. In a corn-shelling machine, the driving bevel-gear wheel C, having formed upon its face an eccentric, in combination with the ring *i* and arm *h*, vibrating arm or rocking shaft E, pawl *j*, and ratchet-wheel F, the whole constructed to operate substantially as and for the purpose specified.

3. In a corn-shelling machine, the fastening-plates *b b'*, formed with the inclined bracket-supports *n n'* for the spring-arms H H', and bearing-ring *a* for bevel-wheel B, substantially as set forth.

4. The combination, with the beveled gear-wheel B, carrying the spring-arms *o o'* and sheller-blades *p p'*, of the driving gear-wheel C, provided with the eccentric *e*, arm *h*, rocking shaft E, pawl *j*, having guide-plates *l l'*, and ratchet-wheel F, and discharge or feed rollers G G', substantially as set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

JOHN N. WOLFE.

Witnesses:

C. R. DRINKLE,

C. H. CREED.