

(No Model.)

H. A. GROTHOLTMAN.

BEAN CUTTER.

No. 365,516.

Patented June 28, 1887.

Fig. 1.

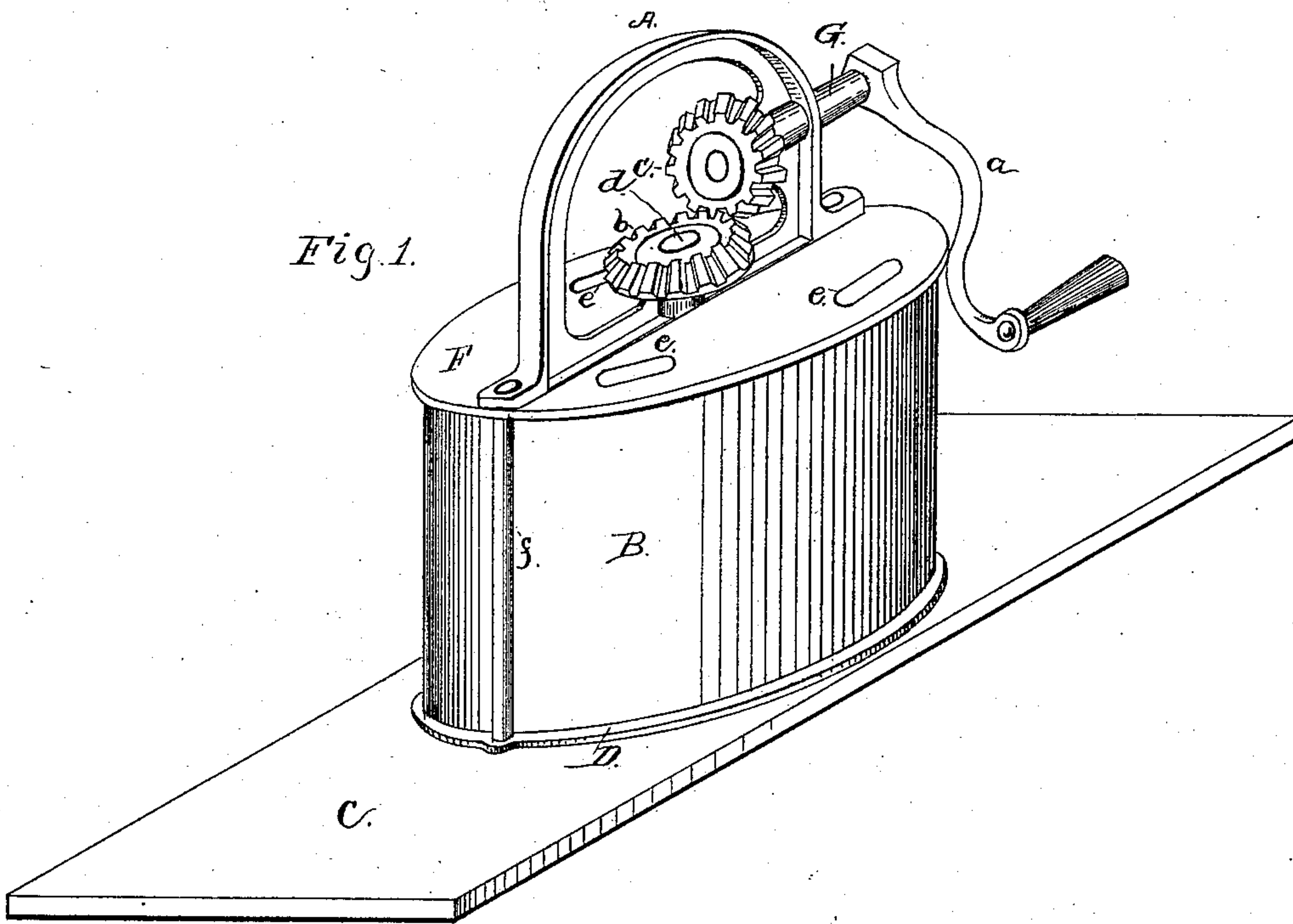


Fig. 2.

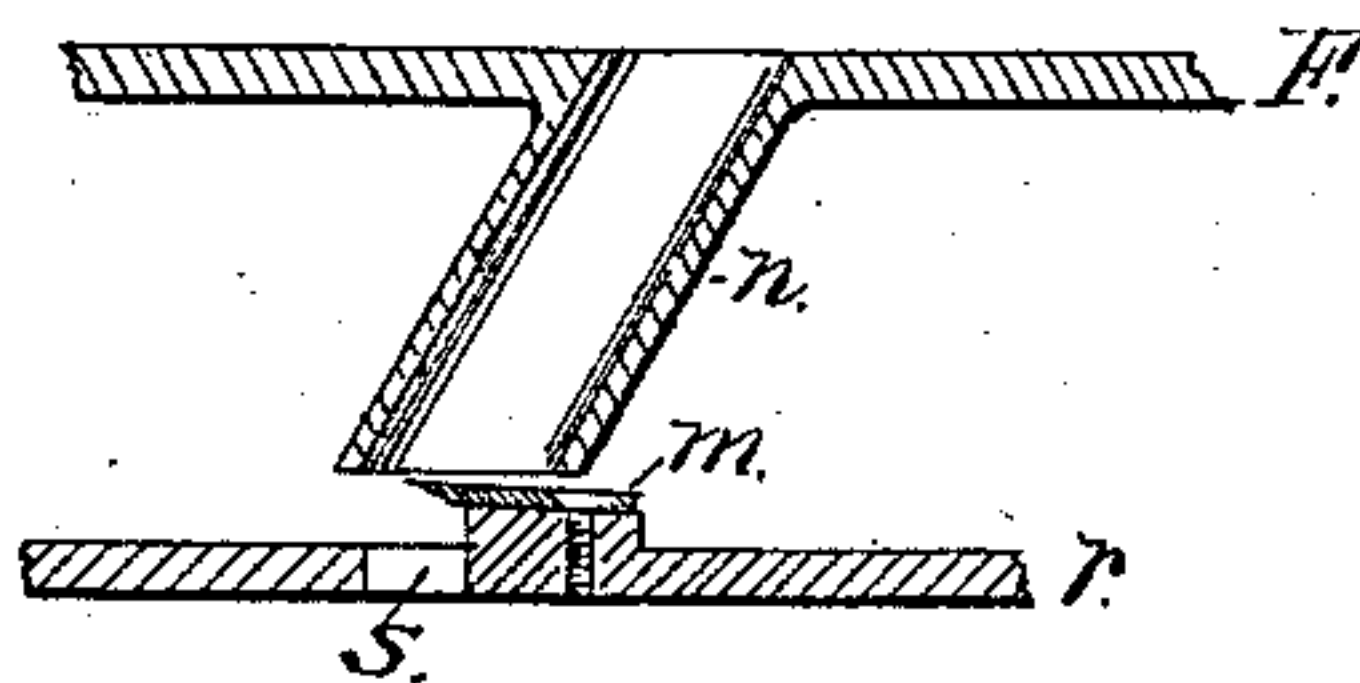


Fig. 3.

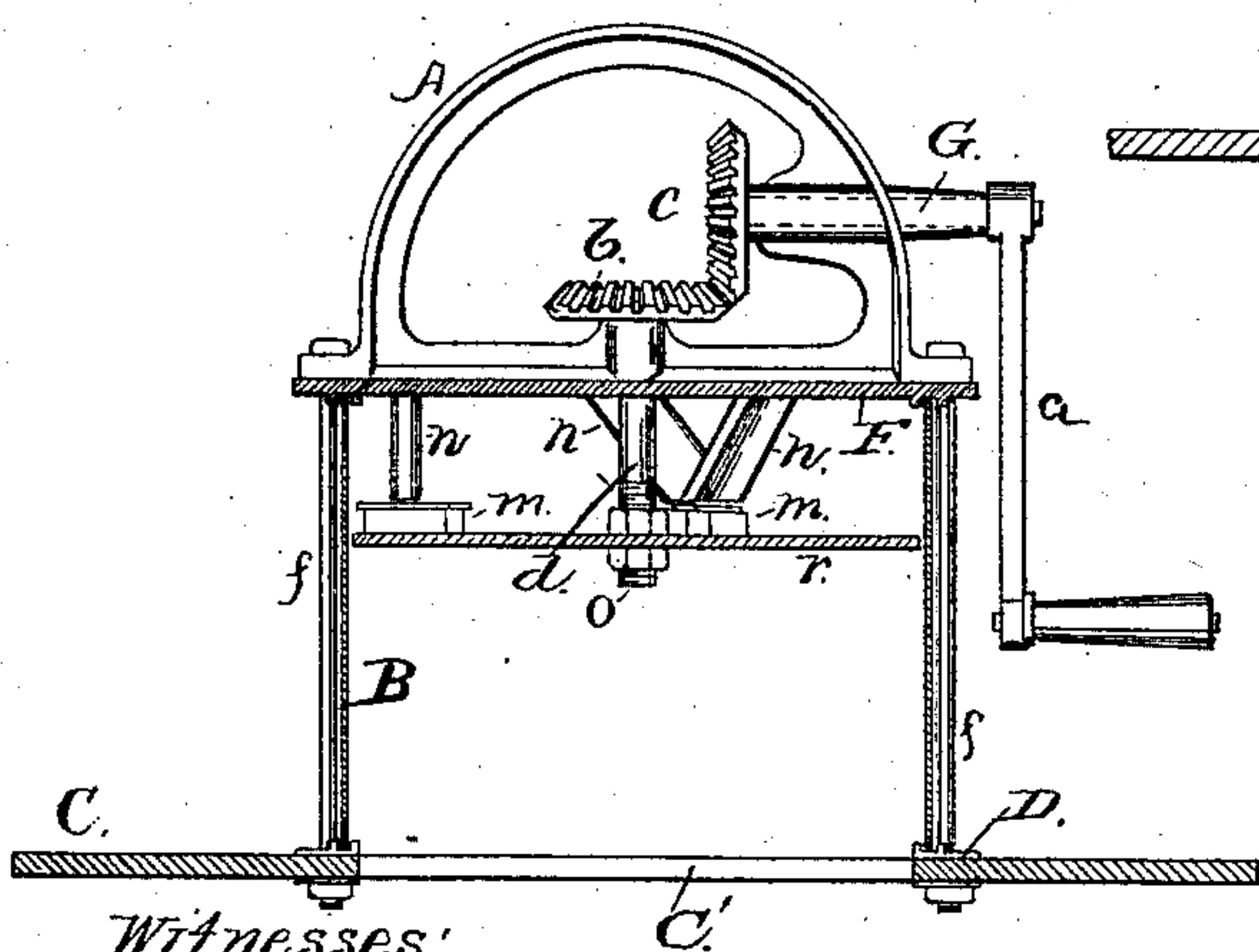
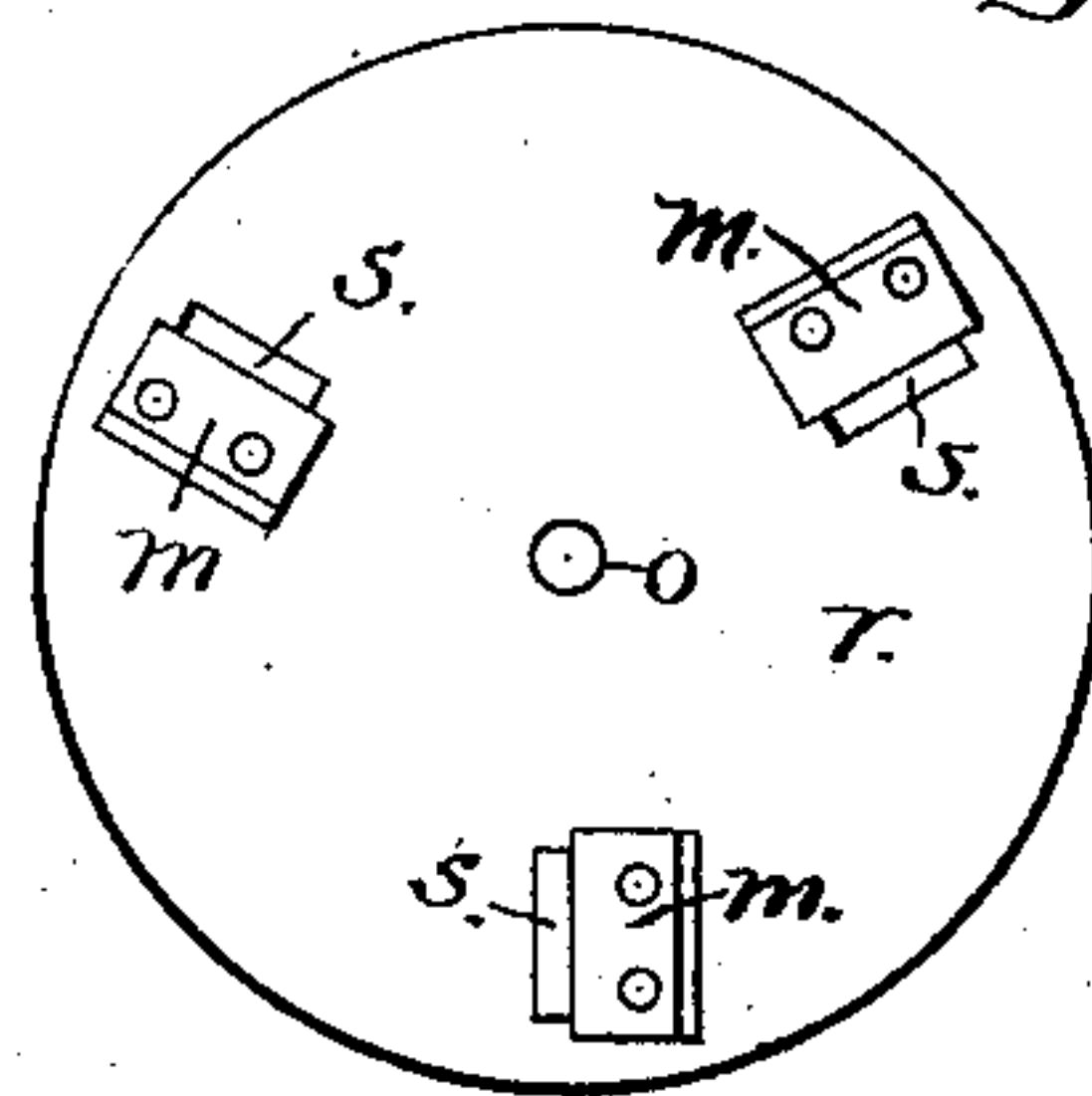


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY A. GROTHOLTMAN, OF FORT WAYNE, INDIANA.

BEAN-CUTTER.

SPECIFICATION forming part of Letters Patent No. 365,516, dated June 28, 1887.

Application filed February 15, 1887. Serial No. 227,728. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. GROTHOLTMAN, of Fort Wayne, in the county of Allen and State of Indiana, have invented a new and useful Improvement in Bean-Cutters, of which the following is a full, clear, and exact description.

My invention has for its object to provide new and useful improvements in machines for slicing beans for pickling and other purposes, so that the machines will be simple in construction, and rapid and effective in operation.

The invention consists in a novel construction and combination of parts, as hereinafter fully described, and particularly pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improved bean-cutter. Fig. 2 is a sectional elevation through one of the feed-tubes and a cutter-knife co-operating therewith. Fig. 3 is a sectional elevation of the machine. Fig. 4 is a detail plan view of the rotary cutter-disk.

The support C, which may be a table-top, is formed with the circular opening C', over which is placed the casing of the machine.

The casing consists of the cylinder B, open at its lower end and received thereat in a groove formed in a ring, D, secured to the support C, around the top of the opening C' therein. The upper end of the cylinder B is covered by a circular head, F, formed in its under face with a peripheral groove to receive the upper edge of the cylinder B.

On the top of the head F is secured the vertical D-shaped frame A, which supports the driving mechanism. Long vertical bolts *f* are passed through each end of the frame A, through the projecting edge of the head F, outside the cylinder B, through the ring D and the support C, and receive nuts on their lower threaded ends. By screwing up these nuts the bolts *f* may be drawn tight to firmly secure the parts of the machine together and to the support C.

In one side of the D-shaped frame A is

journaled a short horizontal shaft, G, the outer end of which carries a crank-arm, *a*, while on the inner end is mounted a bevel gear-wheel, *c*, which engages with a bevel gear-wheel, *b*, on the central vertical shaft, *d*. The vertical shaft *d* is journaled in the straight arm of the D-shaped frame A, passes down through the head F, and receives on its lower end the cutter-disk *r*. The cutter-disk *r* is held between nuts screwing on the lower threaded end of the shaft *d*, whereby it may be adjusted vertically and clamped firmly in place thereon. At equal intervals on the disk *r*, near the periphery thereof, are provided raised blocks, on which are secured by screws or otherwise the flat cutter blades or knives *m*, and in front of the blades openings *s* are formed in the disk. The green beans to be sliced are fed through openings *e* in the head F, and are guided by the tubes *n*, inclined in the direction of rotation of the cutter-disk *r*, into the path of the cutter-blades. The cutter-disk is revolved by means of the crank-arm and bevel-gear described, and the cutter-blades *m*, revolving parallel and closely to the lower ends of the inclined guide-tubes *n*, so as to "shave" the same, quickly and smoothly slice the beans, the pieces of which fall through the openings *s* in the cutter-disk and through the open bottom of the casing into a suitable receptacle placed beneath the support C.

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

1. The bean-cutter consisting of the outer casing having head F, and downwardly-projecting inclined feed-tubes, the vertical shaft *d*, screw-threaded at its lower end and provided with disk-shaped cutter-head *r*, with slicing-knives, and nuts arranged upon the threaded end upon opposite sides of the cutter-head for adjusting the latter vertically, a crank-shaft, G, and bevel-wheels *b c*, connecting the crank-shaft to the vertical shaft, and the frame A, mounted upon the head F, and forming bearings for both the vertical shaft and the crank-shaft, and having a portion of the frame extending over the bevel-wheels, all combined substantially as shown and described.

2. The combination, with the support C, having the opening C', the grooved ring D surrounding the opening, the cylinder B, the head F of the cylinder, and the vertical frame 5 A, in which the driving-gear is mounted, of long bolts *f*, passed through the frame, head, ring, and support, and nuts screwed on the

ends of said bolts, substantially as shown and described.

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Witnesses:

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