

No. 754,548.

PATENTED MAR. 15, 1904.

C. F. DIETZ.

## LAYER CAKE TRIMMING MACHINE.

APPLICATION FILED JAN. 18, 1904.

NO MODEL.

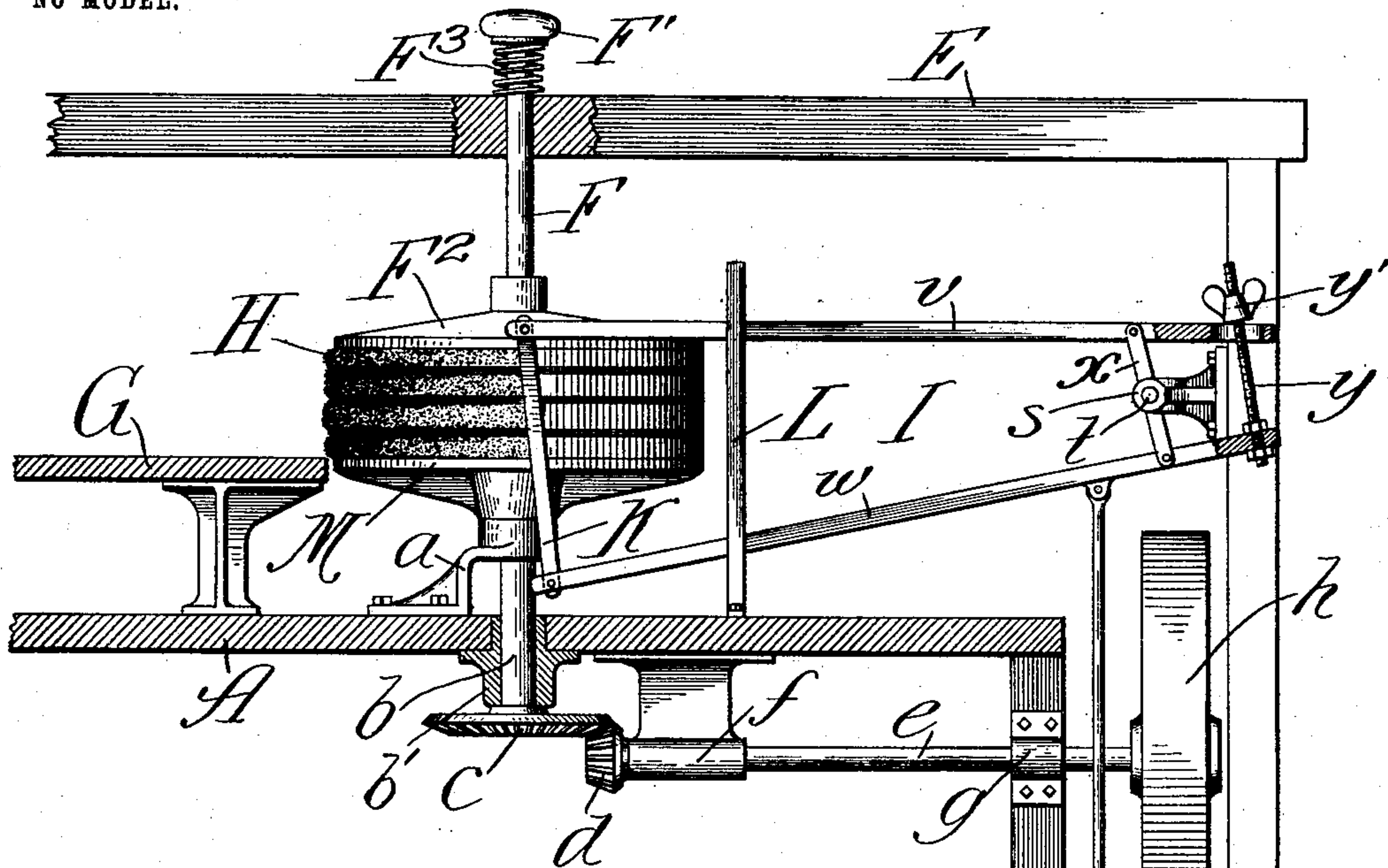


Fig. 1.

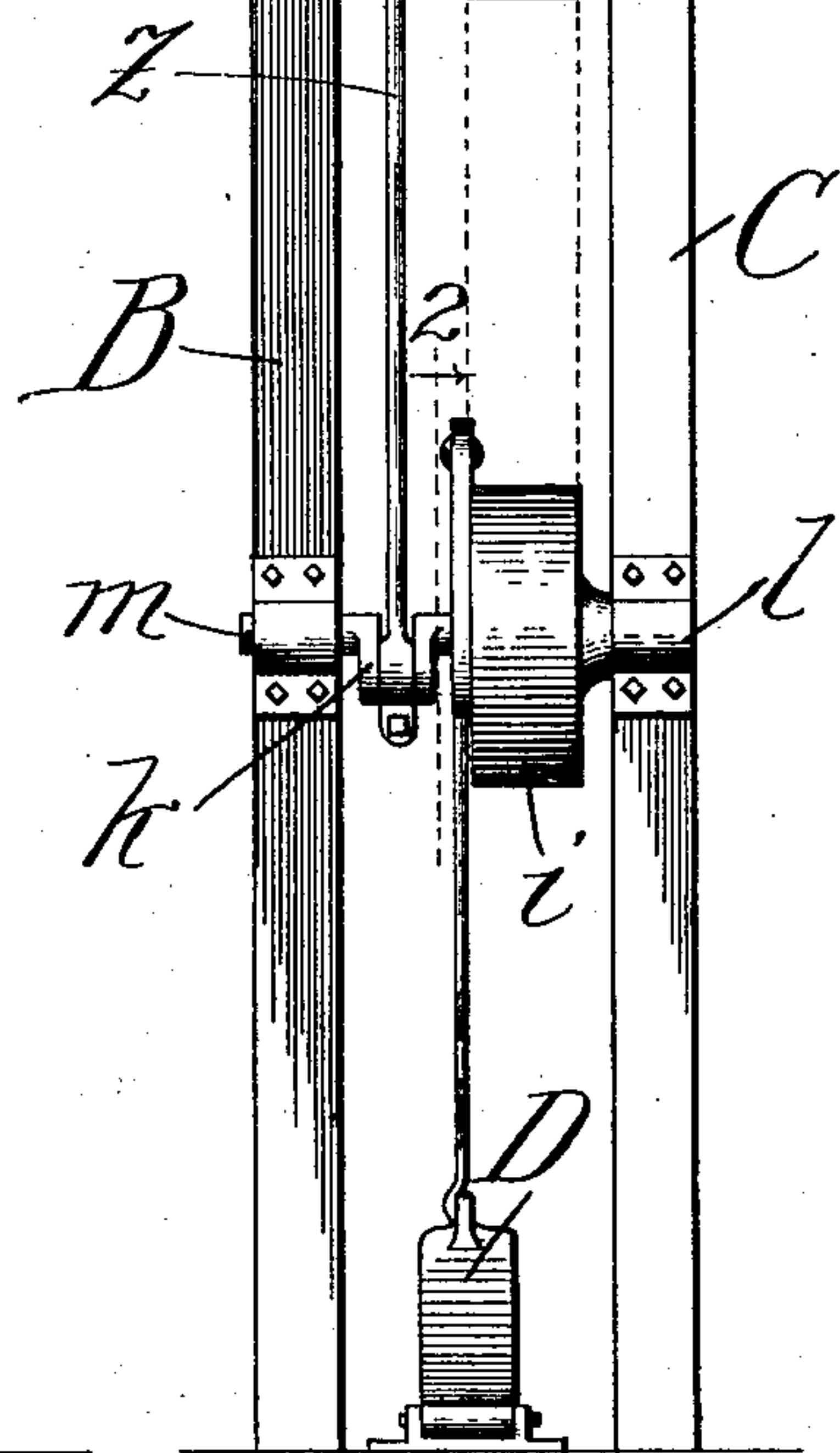
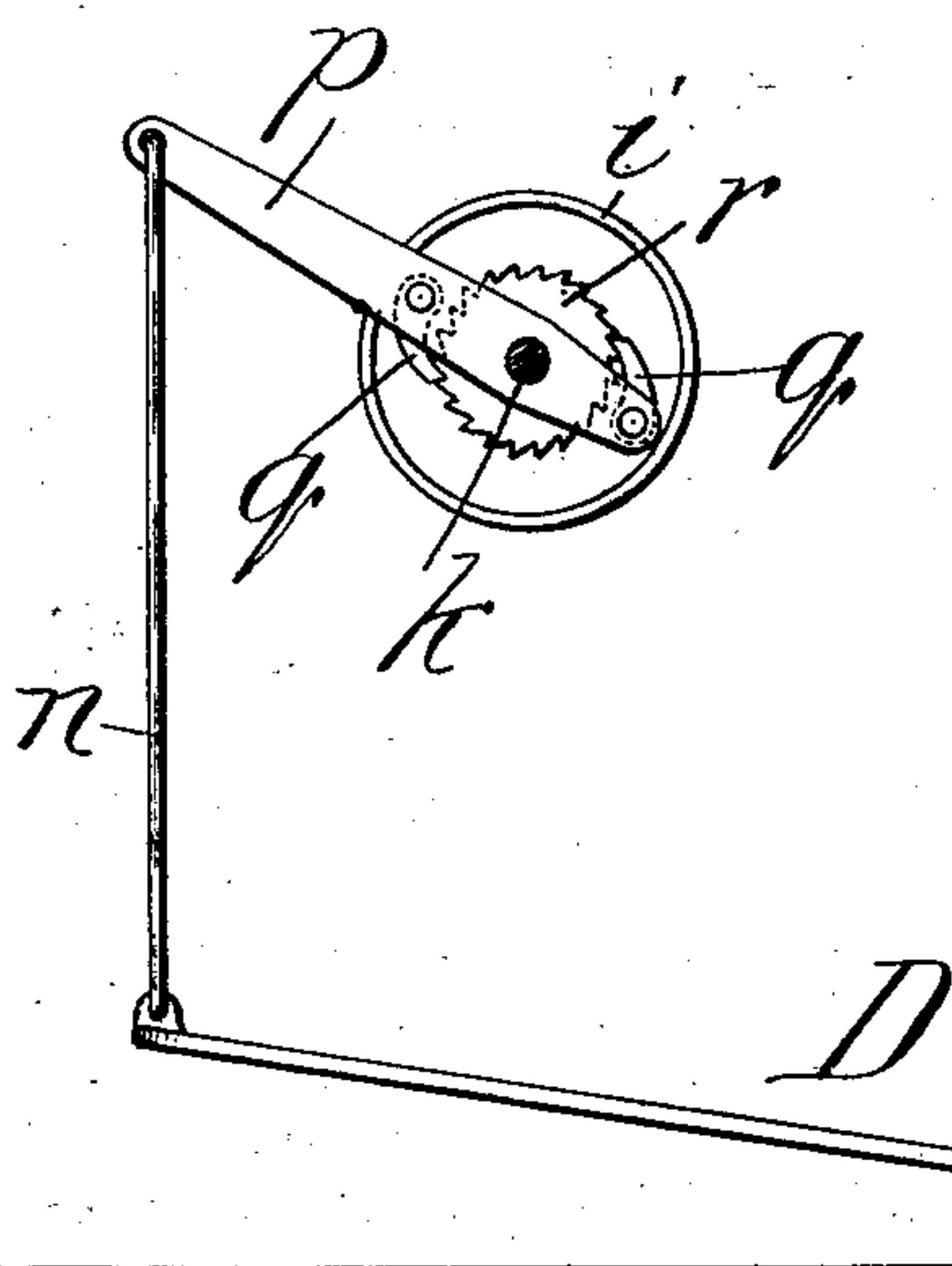


Fig. 2.



Witnesses:  
Ed. Chylord,  
Geo. C. Dawson.

Inventor  
Christian F. Dietz,  
By Dyrenforth, Dyrenforth <sup>and</sup> Lee  
Attys



# UNITED STATES PATENT OFFICE.

CHRISTIAN F. DIETZ, OF CHICAGO, ILLINOIS, ASSIGNOR OF TWO-THIRDS  
TO AUGUST JUNGE, OF CHICAGO, ILLINOIS, AND PHILLIP F. CARROLL,  
OF JOLIET, ILLINOIS.

## LAYER-CAKE-TRIMMING MACHINE.

SPECIFICATION forming part of Letters Patent No. 754,548, dated March 15, 1904.

Application filed January 18, 1904. Serial No. 189,498. (No model.)

*To all whom it may concern:*

Be it known that I, CHRISTIAN F. DIETZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Layer-Cake-Trimming Machines, of which the following is a specification.

In order that a layer cake shall present the desired attractive appearance, it should be perfectly round and have a smooth circumferential face. In bakeries where it is usual to turn out a large number of layer cakes each night it has been necessary hitherto to employ persons especially skilled in trimming layer cakes by hand, because no machine has been provided for the purpose, so far as I am aware.

My object is to provide a machine of simple and improved construction by the use of which layer cakes may be trimmed more accurately and quickly than is possible when the operation is performed by hand, as hitherto, and whereby a material saving in the expense of producing such cakes may be effected.

In the drawings, Figure 1 is a broken and partly-sectional elevation of my improved machine, and Fig. 2 a section taken on line 2 in Fig. 1.

A is a table or platform, and B and C are standards. Journaled in a bracket *a* on the table A and passing downward through a bearing or bushing *b'* is a vertical shaft *b*, provided at its upper end with a disk M. The shaft *b* carries at its lower end a beveled gear *c*, meshing with a beveled pinion *d* on a horizontal shaft *e*, journaled in a bracket *f* on the under side of the table and in a bearing *g* on the standard B. Beyond the said standard the shaft *e* carries a pulley *h*, belted to a pulley *i*, having a crank-shaft *k*, journaled in bearings *l m* on the standards B C.

D is a treadle connected by a link *n* with a lever *p*, fulcrumed on the shaft *k* and carrying spring-pawls *q*, engaging a ratchet-wheel *r*, formed integral with the pulley *i*. By working the treadle D the pulley *i* is rotated to turn the pulley *h*, shafts *e b*, and disk M.

Above the table A is a support E, forming

a bearing for a plunger-shaft F, having a knob F' at its upper end and a disk F<sup>2</sup> preferably journaled upon its lower end. Confined between the support E and knob F' is a spring F<sup>3</sup>, which nearly balances the weight of the shaft and disk F<sup>2</sup>.

G is a platform in the plane of the upper surface of the disk M. A layer cake H may be slid from the platform G onto the disk M and held in place between the disks M F<sup>2</sup>, as shown.

A bracket *s* on the standard C carries a shaft *t*.

I is a frame formed with an upper bar *v*, lower bar *w*, and link connection *x*, to which they are pivoted. The link *x* between its ends is fulcrumed upon the shaft *t*. Beyond the said link the upper and lower bars *v w* are connected by a tightening-screw *y*, carrying a wing-nut *y'*. Fastened to the opposite end of the frame I is a knife-blade K, of thin metal, which is tensioned by spreading the bars *v w* apart by means of the tightening-nut *y'*. A rod or pitman *z* extends from the crank-shaft *k* and is pivotally connected with the under side of the frame I. In the rotation of the shaft *k* the frame I is reciprocated in the vertical plane and moves at its side against a guide-standard L on the table A, which holds the knife-blade in contact with the disks M F<sup>2</sup>.

In operation the operator raises the shaft F and disk F<sup>2</sup>, places a layer cake H to be trimmed upon the disk M, and permits the disk F<sup>2</sup> to rest upon the cake to clamp it gently in place and form with the disk M edges against which the knife K may shear. Working of the treadle D causes the disks and layer cake H to be rotated and the knife-frame I to be vibrated. The knife is slightly inclined in the frame, as shown, and as it rises and descends it cuts the cake in a manner to present the desired smooth surface of the latter. As before stated, the spring F<sup>3</sup> nearly counterbalances the weight of the shaft F and disk F<sup>2</sup>, journaled thereon. Thus they will normally exert but little pressure upon the cake. When the cake is soft, it will be held with sufficient friction by the disks M F<sup>2</sup> to turn against



the resistance of the knife; but in the case of a harder cake the operator may exert pressure with his hand upon the knob F' to clamp the cake with desired firmness between the disks.

5 The machine constructed as described performs the trimming operation accurately and rapidly and is of a simple, inexpensive, and desirable construction for its purpose.

10 Modifications may be made in details of construction without departing from the spirit of the invention as set forth in the claims.

What I claim as new, and desire to secure by Letters Patent, is—

15 1. In a layer-cake-trimming machine, a cake-supporting disk presenting an annular shearing edge, a vibratory frame, a knife on said frame movable along said shearing edge, and a drive-shaft with which said disk and frame are operatively connected, substantially as and  
20 for the purpose set forth.

2. In a layer-cake-trimming machine, a lower rotary cake-supporting disk presenting

an annular shearing edge, an upper cake-clamping disk also presenting an annular shearing edge, a vibratory frame, a knife on said frame 25 movable along both said shearing edges, and a drive-shaft with which said lower disk and frame are operatively connected, substantially as and for the purpose set forth.

3. In a layer-cake-trimming machine, a plat- 30 form, a lower horizontal rotary cake-supporting disk in the plane of said platform and presenting an annular shearing edge, an upper cake-clamping disk also presenting an annular shearing edge, a vibratory frame, a knife of 35 thin metal held by and tensioned in said frame and movable along said shearing edges, and a drive-shaft with which said lower disk and frame are operatively connected, substantially as and for the purpose set forth.

CHRISTIAN F. DIETZ.

In presence of—

WALTER N. WINBERG,  
J. W. DYRENFORTH.