

No. 898,109.

PATENTED SEPT. 8, 1908.

C. W. HOTTMAN.
MACHINE FOR CUTTING CABBAGE.
APPLICATION FILED JULY 20, 1905.

FIG. 1.

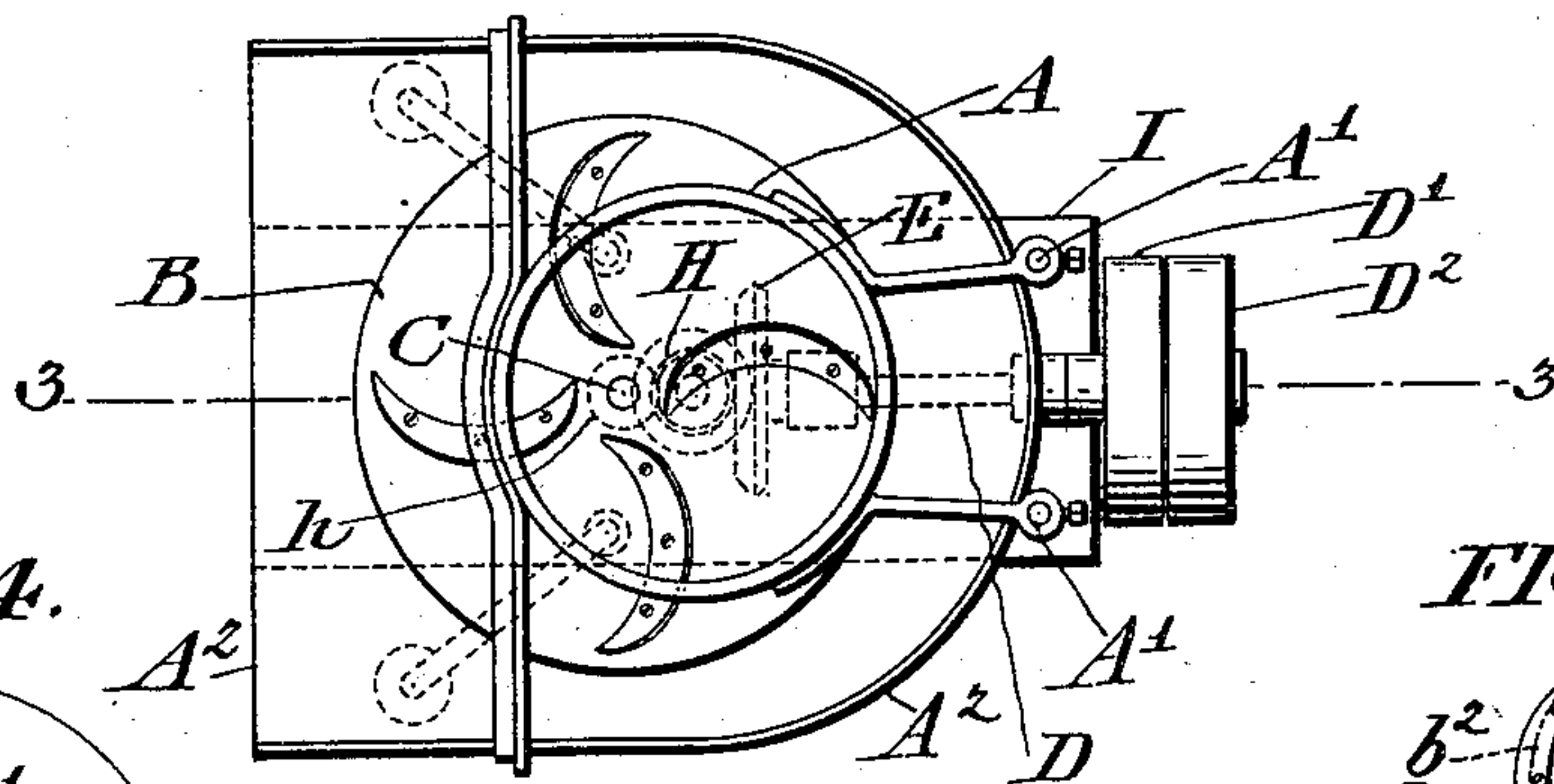


FIG. 4.

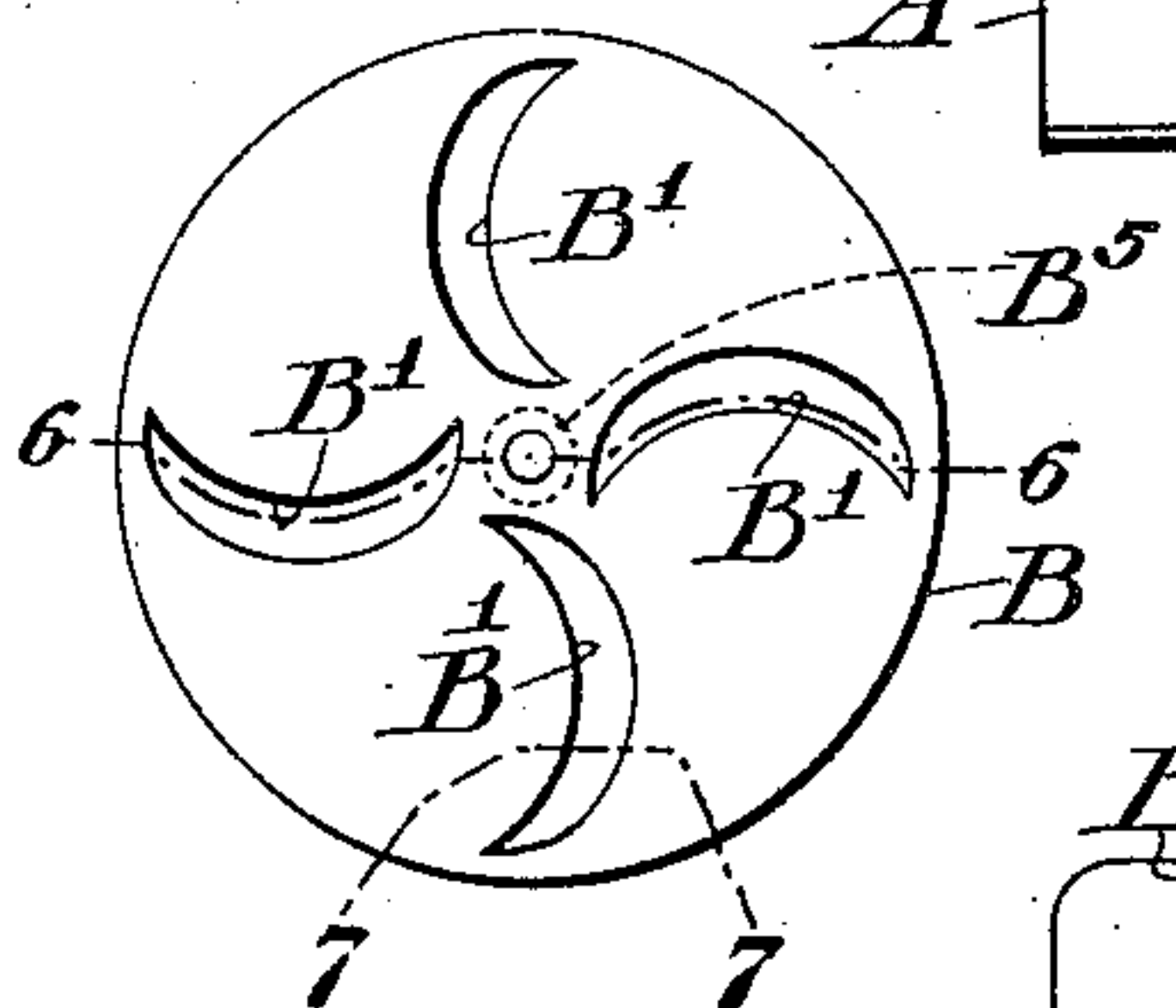


FIG. 2.

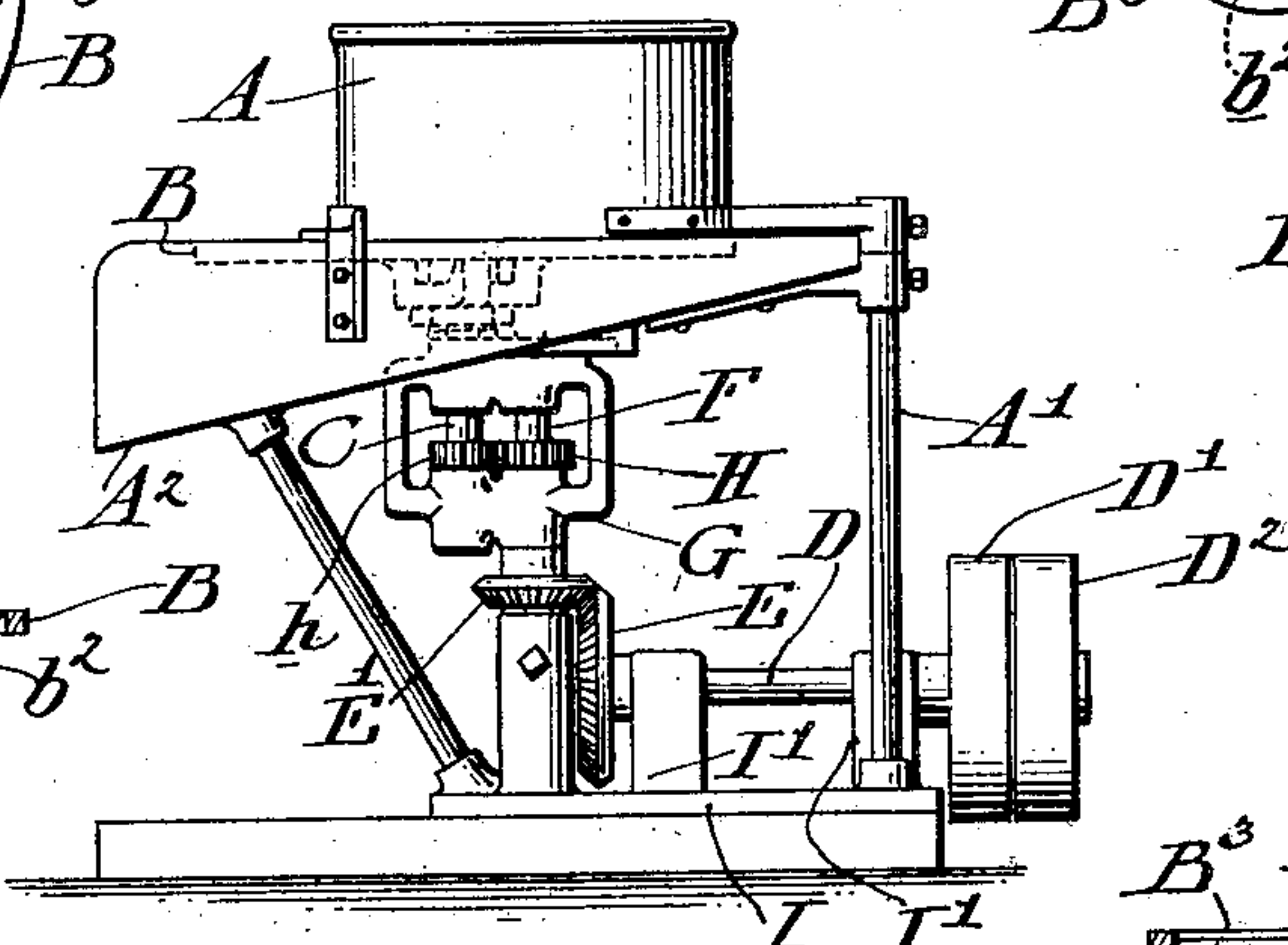


FIG. 5.

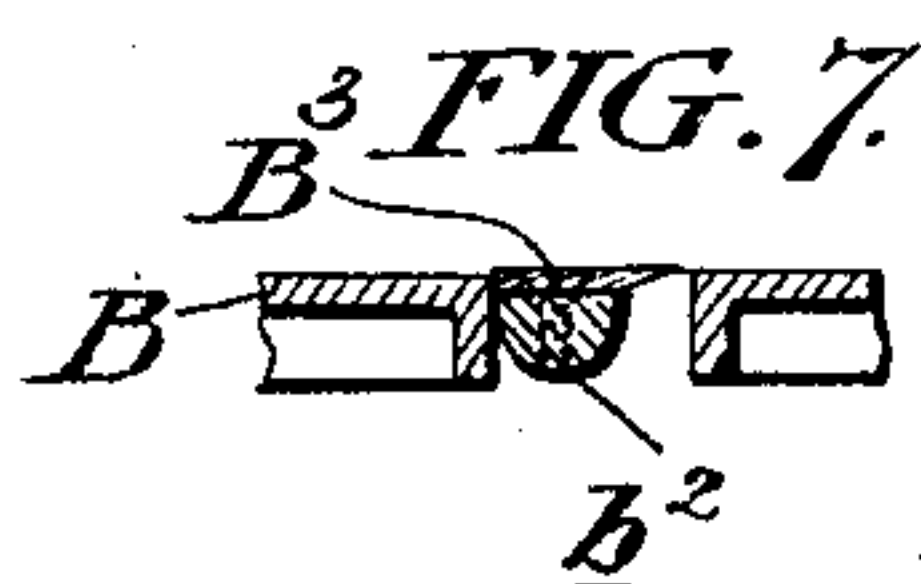
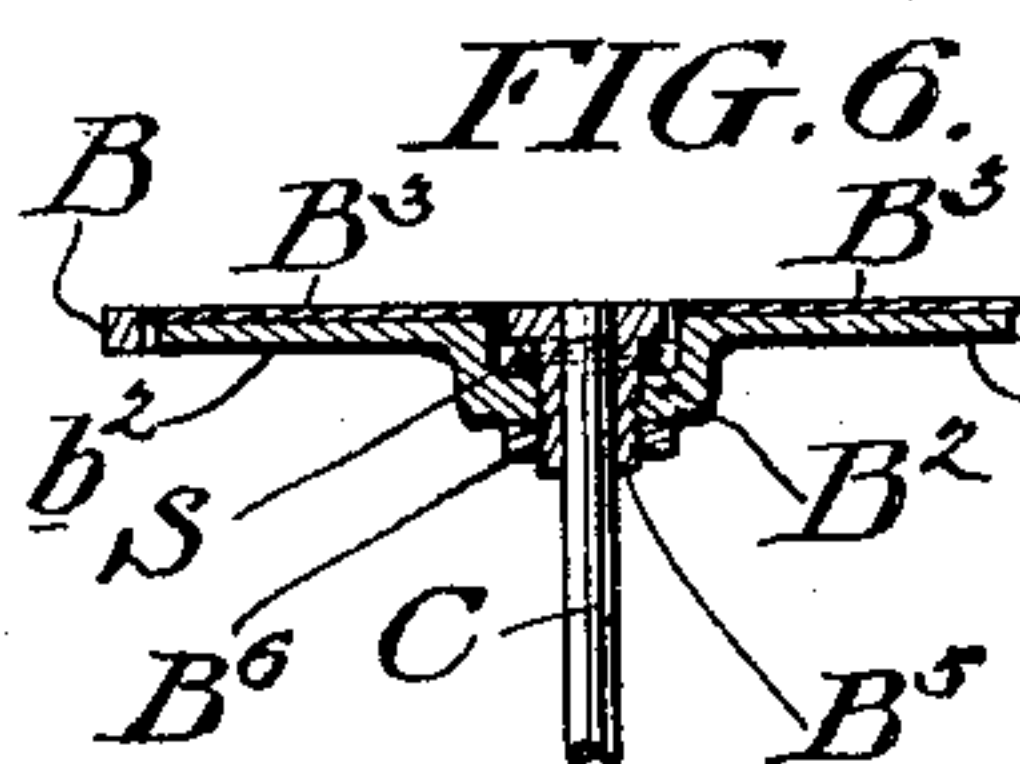
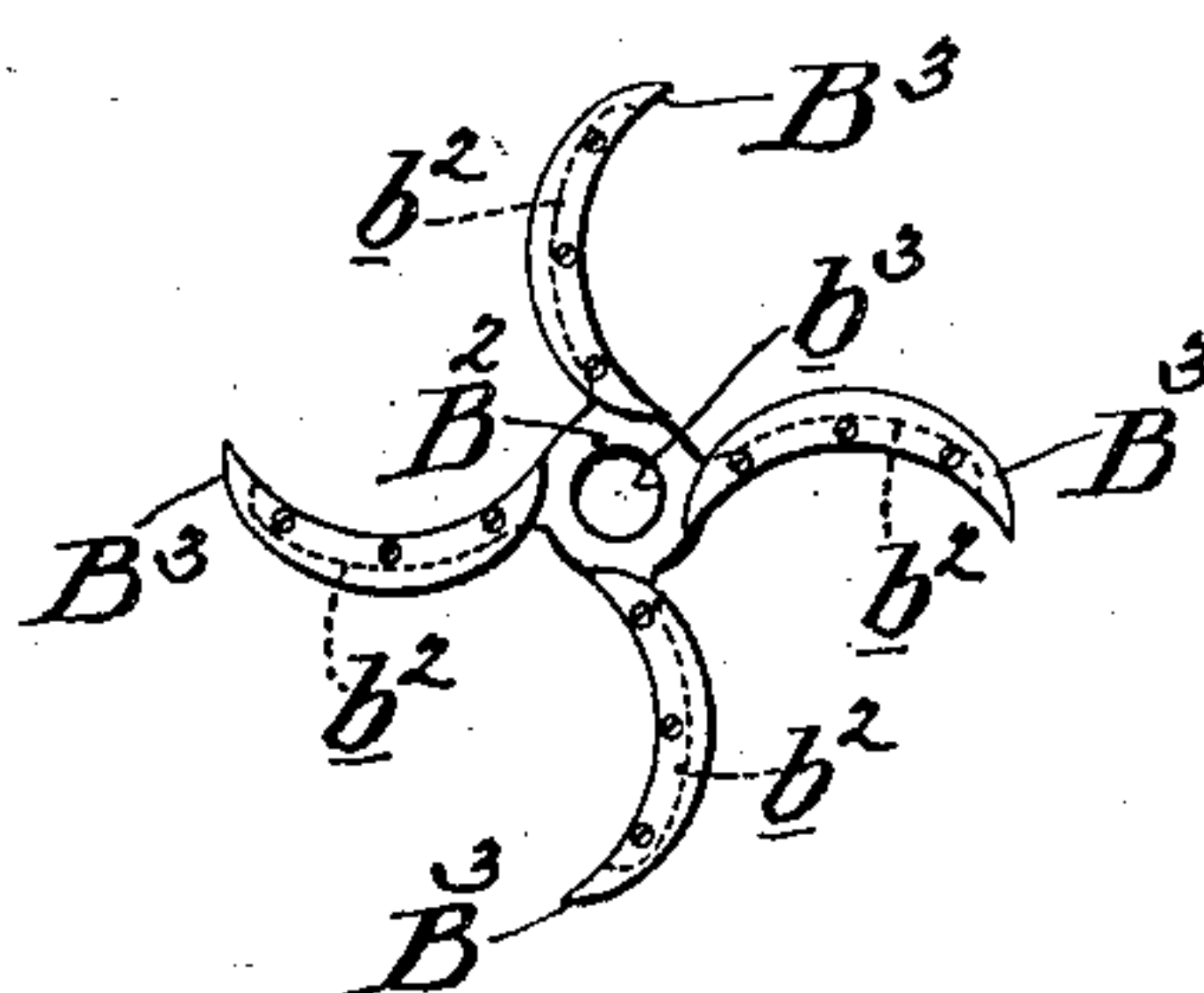
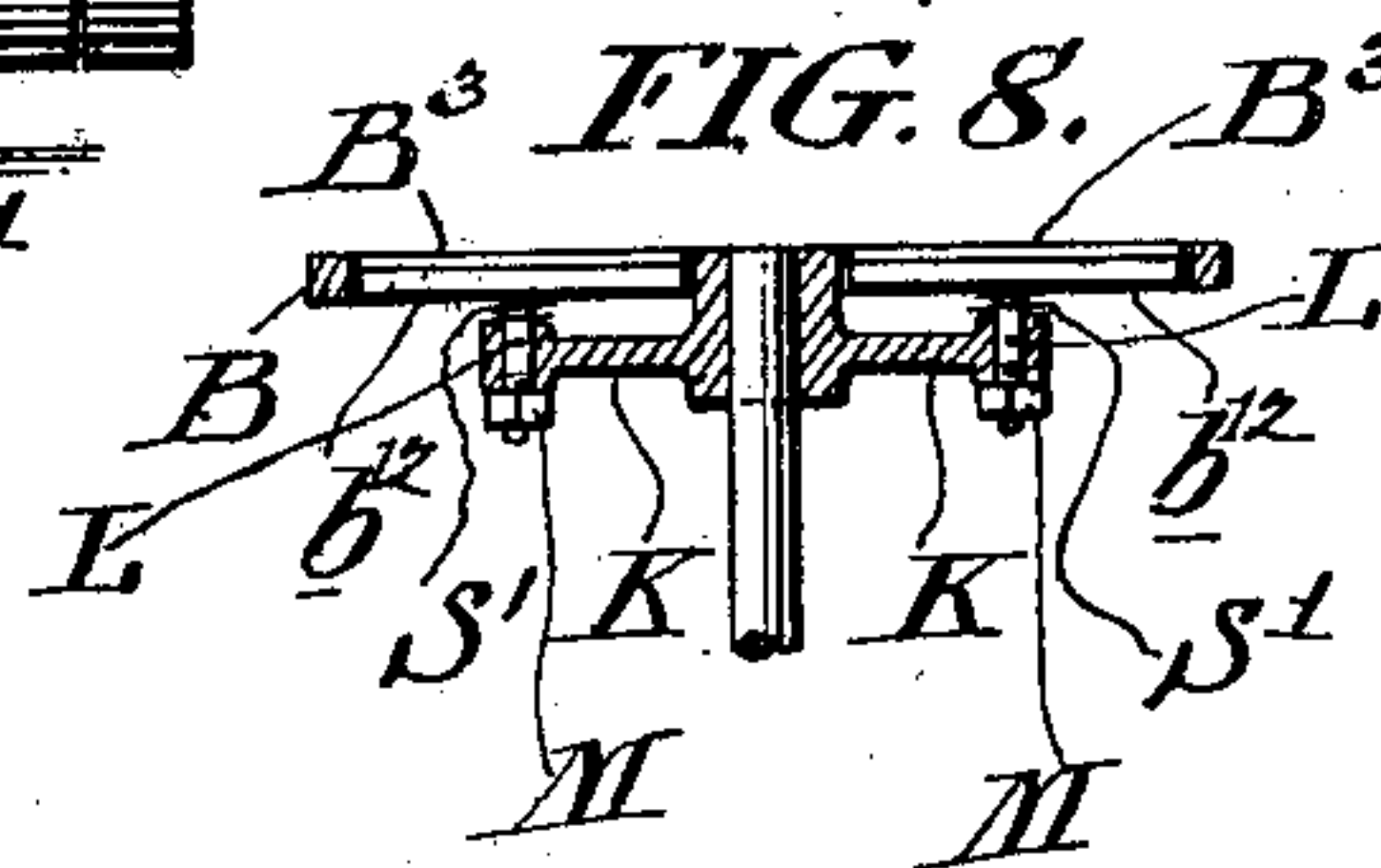
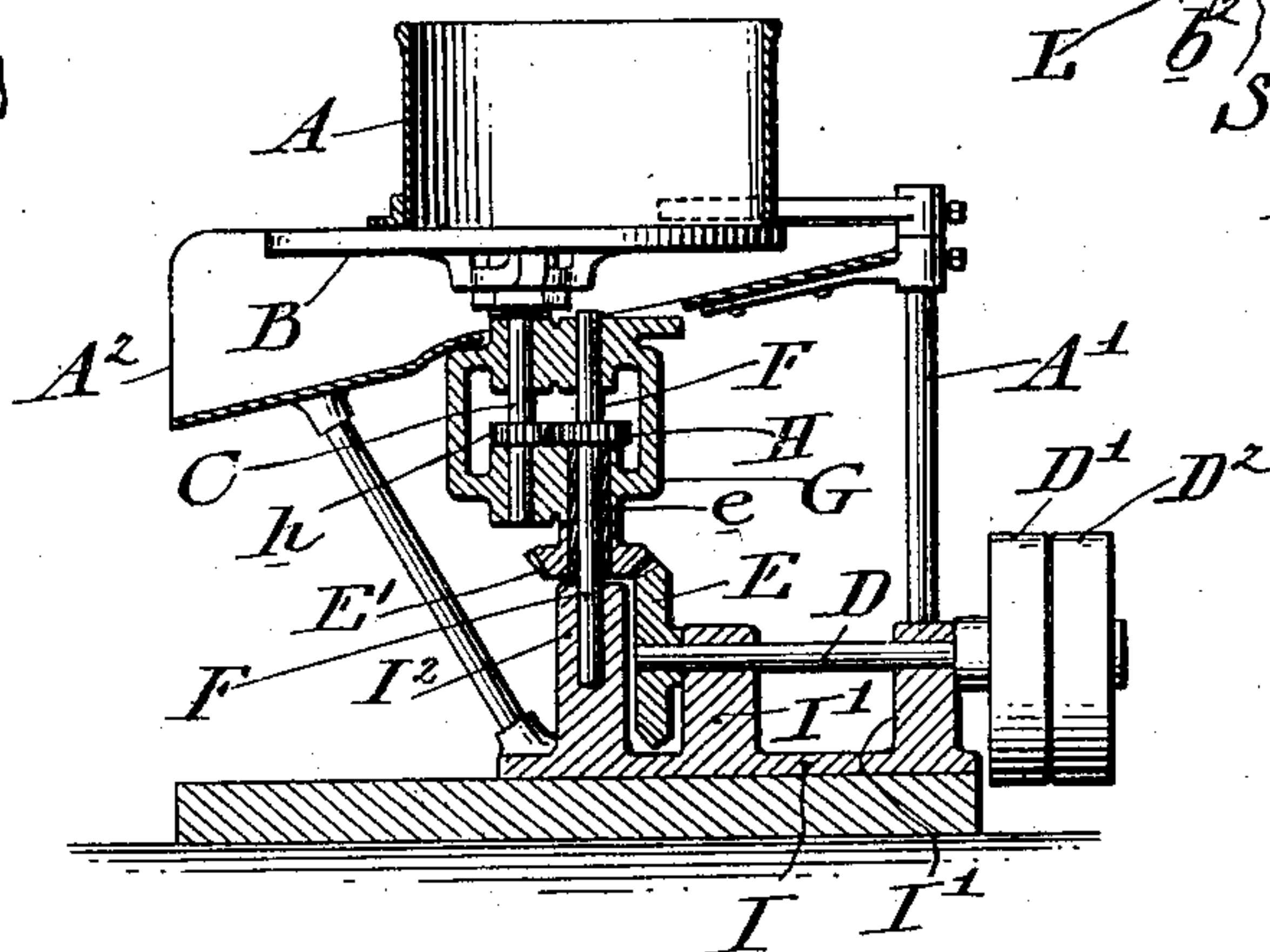


FIG. 3.



WITNESSES:

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MACHINE FOR CUTTING CABBAGE.

No. 898,109.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed July 20, 1905. Serial No. 270,461.

To all whom it may concern:

Be it known that I, CHARLES W. HOTTMAN, a subject of the Emperor of Germany, having declared his intention of becoming a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Cutting Cabbage, of which the following is a specification.

My invention relates to improvements in devices for slicing vegetables, particularly cabbage, and is designed to overcome the dead center common to cutters in which rotary knives are employed and thereby obviate the central grinding action which not only has a tendency to bruise the product but also tends to retard the free cutting action of the knives.

My invention further embodies a means for adjusting the knives with respect to the plate by which they are carried for the purpose of gaging the thickness of the slices to be severed from the mass of material acted upon.

My invention will be more fully understood by reference to the accompanying drawings, in which:

Figure 1 illustrates a plan view of my vegetable cutter. Fig. 2 represents a front elevation of same. Fig. 3 denotes a vertical section on a line 3—3 of Fig. 1. Fig. 4 shows a detached plan view of the rotatable knife plate, the knives being removed to show the shape of the openings formed to receive them. Fig. 5 illustrates a detached plan view of the knives and the spider by which they are supported. Fig. 6 represents a transverse section of the knife plate with the knives in position the section being taken approximately on line 6—6 of Fig. 4. Fig. 7 shows an enlarged section of a portion of the knife plate and a portion of one of the knives the purpose of which is to illustrate the relative position of one with respect to the other, and Fig. 8 illustrates a section similar to that shown in Fig. 6 except that the means for supporting and adjusting the knives has been slightly modified.

Referring to the reference letters of the drawings, A, represents the hopper; B, the cutter plate; C, the vertical shaft on which the cutter plate is fastened; D, the horizontal driving shaft; F, the fixed vertical shaft; and, G, the bracket carrying the shaft C.

The shaft C, is mounted in suitable bearings in the bracket G, and is provided with a pinion h , which meshes with a gear wheel H, fastened to the fixed shaft F. The bracket G, is connected to a bevel pinion E' , by means of a sleeve e which loosely surrounds the shaft F, but is fixedly secured both to the bevel pinion and to the bracket. The beveled pinion E' , meshes with a corresponding gear E, which is mounted upon a driving shaft D, provided respectively with fast and loose pulleys D' and D^2 . The shaft D, is journaled in bearings $I' I'$, projecting from a bed plate I, which is also provided with a column I^2 , which supports the fixed shaft F. The hopper A, is supported by uprights A' , A' , projecting from the bed plate I, and is provided with an inclined chute A^2 , to carry off the finished product.

The cutter plate B, is provided with crescent-shaped openings B' , in which rest the knives B^3 . These knives are fastened to a spider as shown in Fig. 5, the same consisting of a hub B^2 , having an opening b^3 , which embraces a corresponding hub B^5 , on the cutter plate B, and arms b^2 , b^2 , etc., to which the knives B^3 , are fastened. The spider together with the knives is vertically adjustable with respect to the plate B, for the purpose of gaging the thickness of cut, and to this end is provided with a special spring S, located between the plate B, and the hub B^2 of the spider and tending normally to press the latter down. The hub B^5 , is threaded at or near the bottom to receive a nut B^6 , which may be turned to force the spider upwards against the action of the spring S. A similar construction is shown in Fig. 8, except that the knives B^3 , are mounted upon independent plates b^{12} , b^{12} , which are fastened to studs L, L, and these are held by projecting arms K, K, connected to or forming part of the hub of plate B. The adjustment is similarly made by means of nuts M, M, acting against the action of springs S' , S' .

The operation of the machine is as follows: When the shaft D, is rotated it imparts a rotary motion to the bracket G, through the medium of the bevel gears E, and E' , and as the shaft C, is journaled in the bracket G, it is also turned and describes a circle concentric to the wall or rim of the hopper. While this rotary motion of the shaft C and bracket G, is taking place the shaft C, is also caused

to turn in its bearings by the pinion *h*, on the shaft C engaging a gear H, fixedly secured to the stationary shaft F, and thus it will be seen that the cutter plate B, is given two motions, one on its own axis and another on an axis of which the shaft F, is the center.

Having described my invention what I claim and desire to secure by Letters Patent is:

- 10 A vegetable cutter comprising a hopper, a cutter plate arranged below the hopper, a rotatable shaft supporting said cutter plate, a bracket loosely mounted upon a fixed shaft

and provided with bearings to receive the rotatable shaft, a gear wheel secured to the fixed shaft, a pinion in engagement therewith secured to the rotatable shaft, a bevel pinion fastened to said bracket and a bevel gear engaging the same mounted upon a shaft suitably driven, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES W. HOTTMAN.

Witnesses:

ARNOLD KATZ,

DAVID S. WILLIAMS.