

T. H. ELLIOTT.
FRUIT SEEDER.
APPLICATION FILED FEB. 24, 1908.

Patented Sept. 21, 1909.

934,900.

FIG. 1.

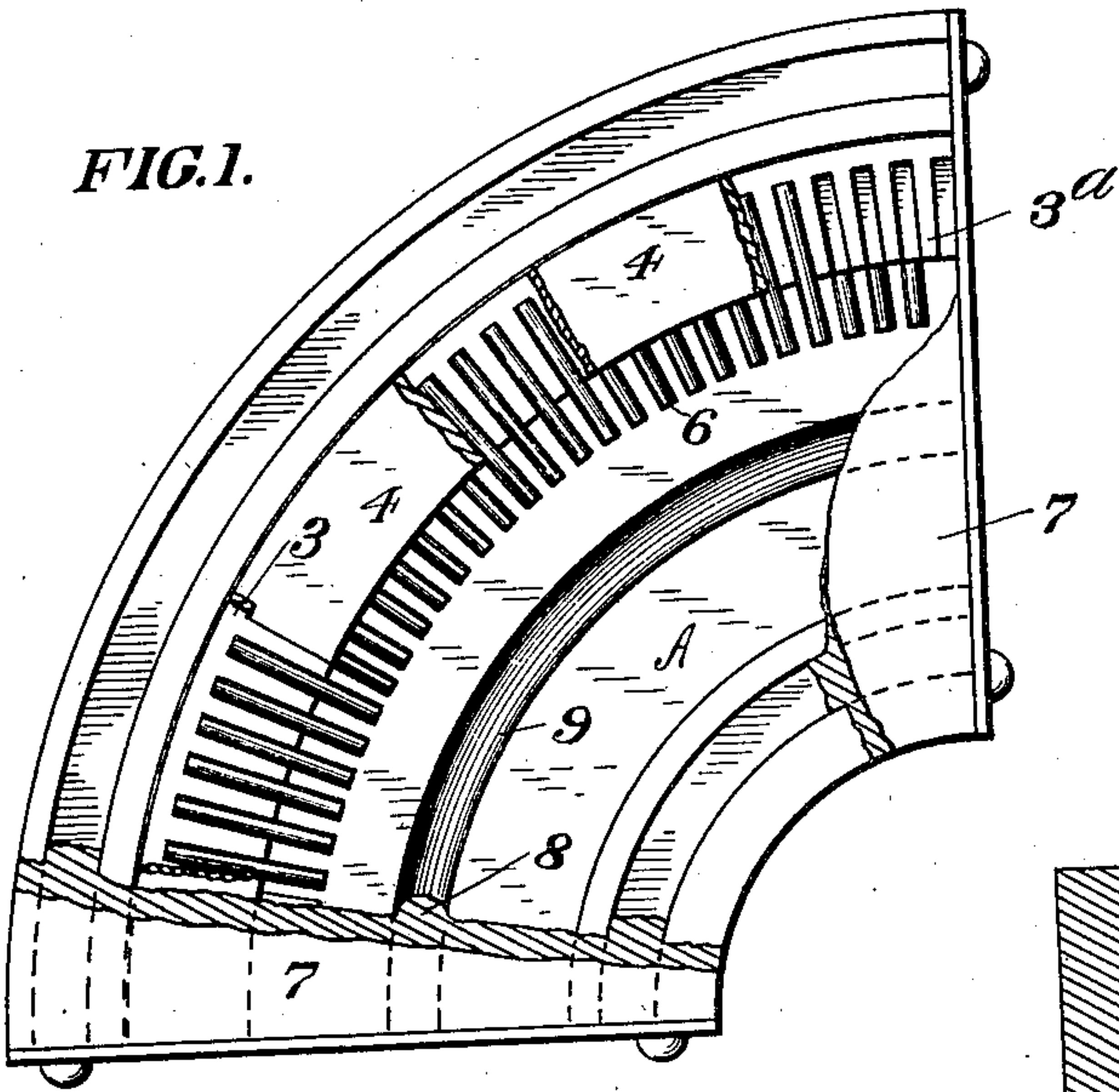


FIG. 6.

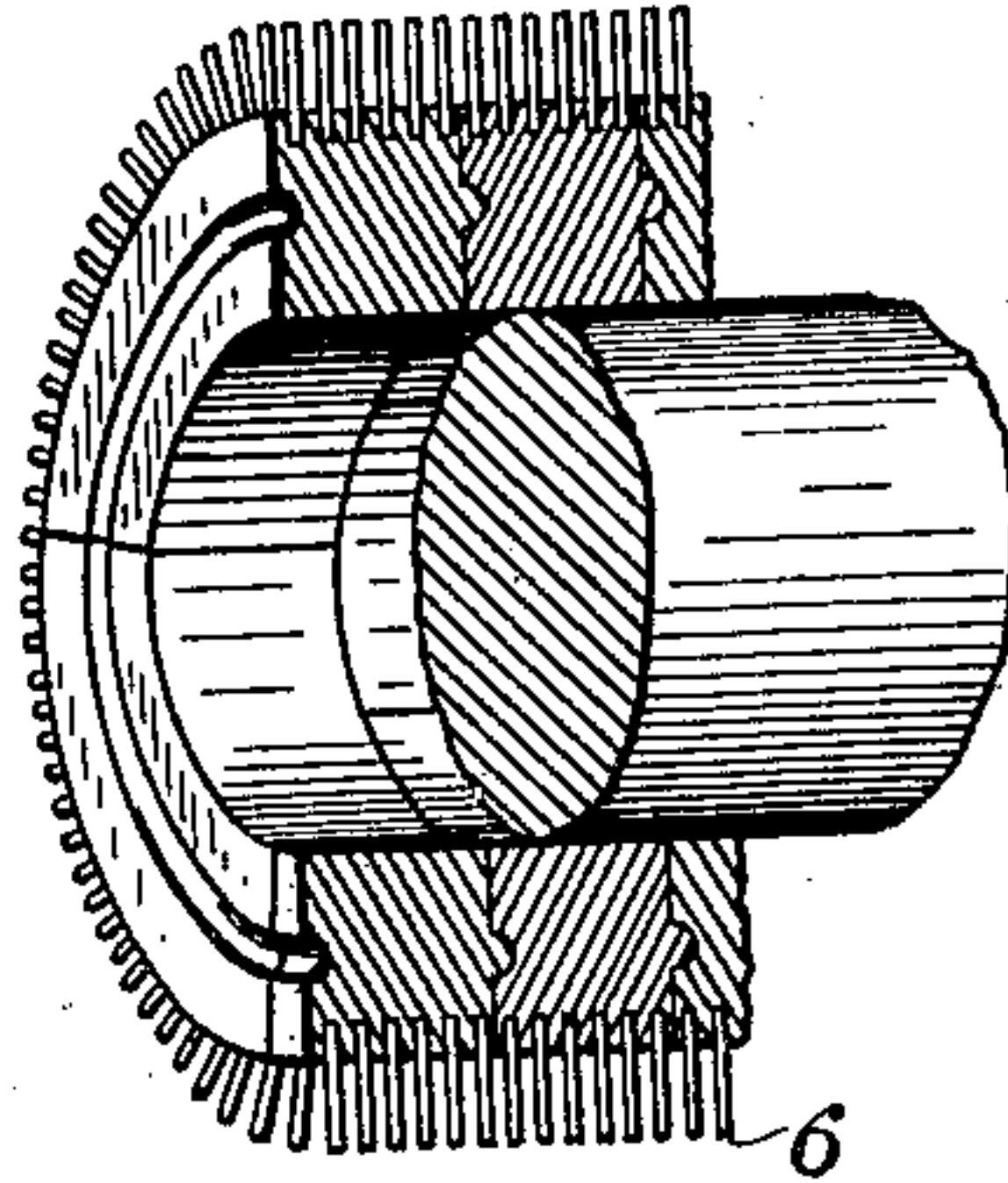


FIG. 3.

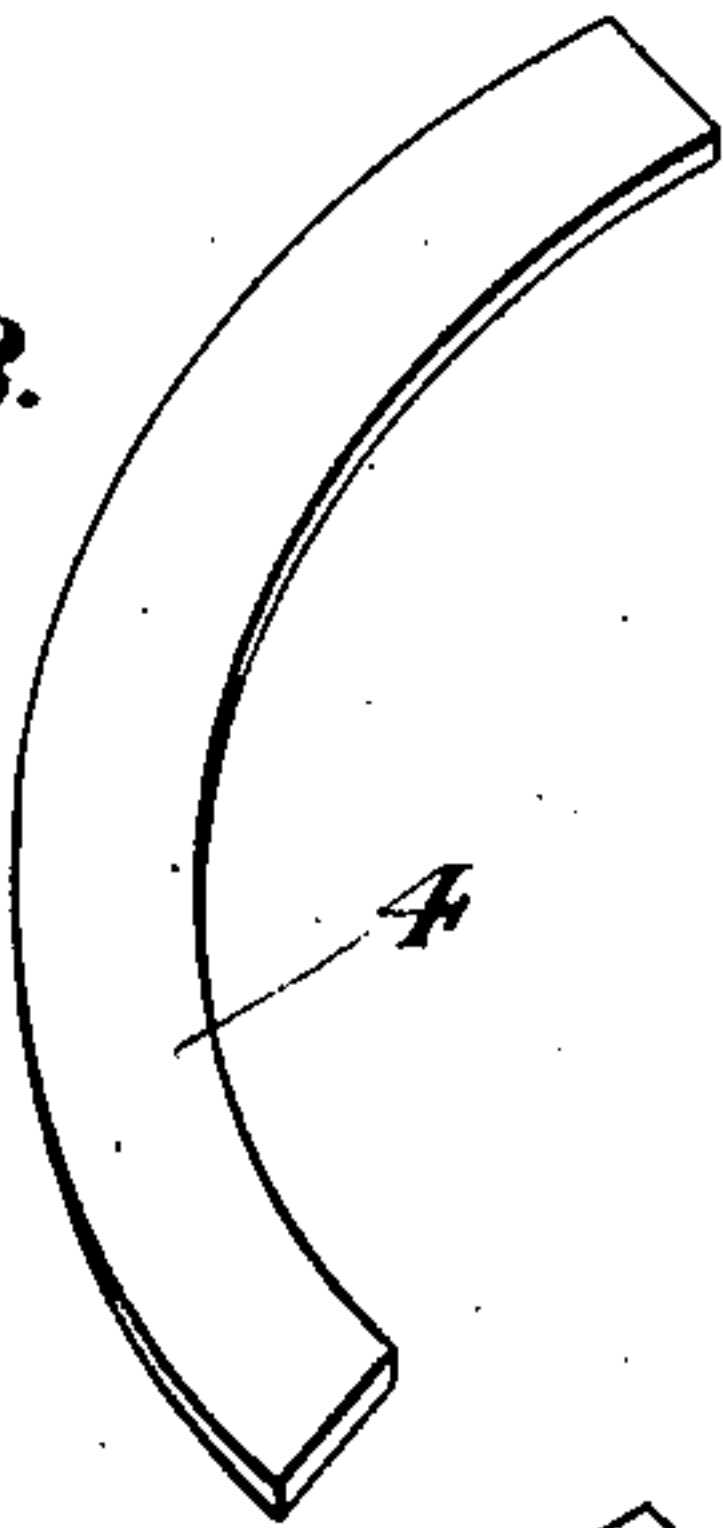


FIG. 2.

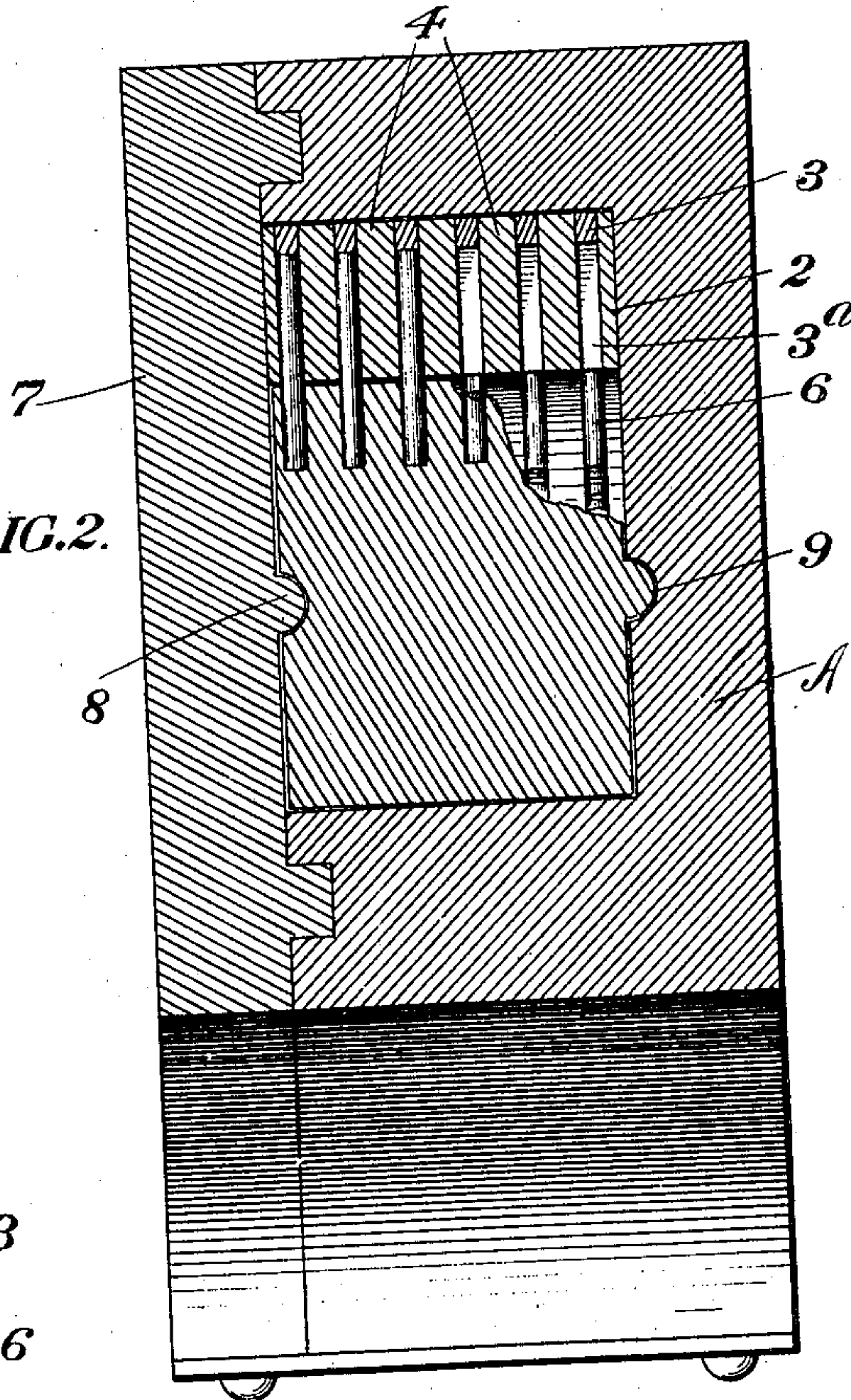


FIG. 4.

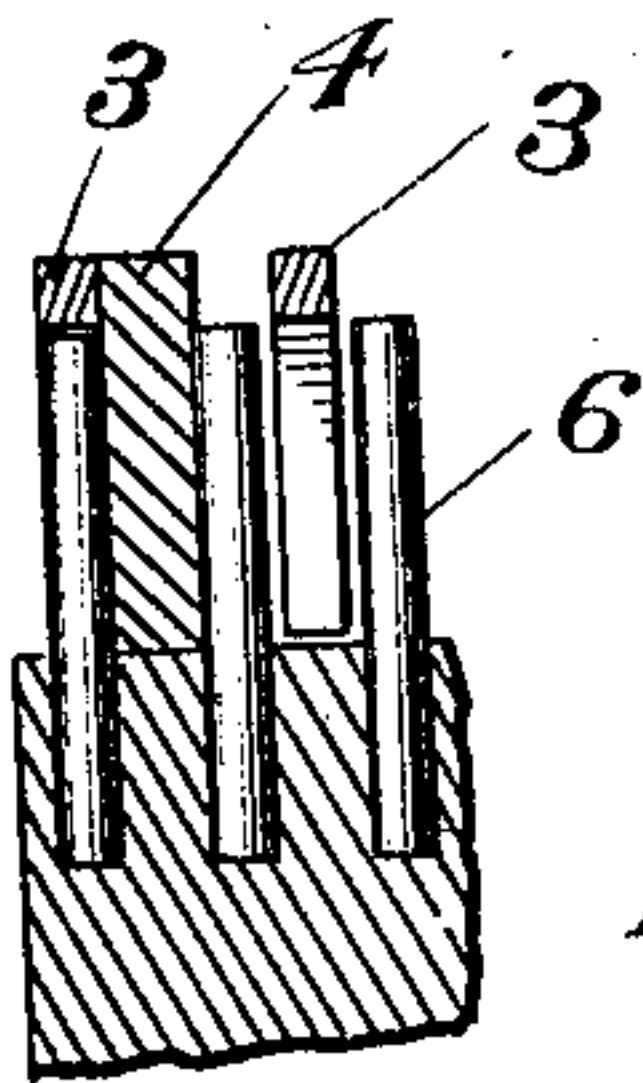
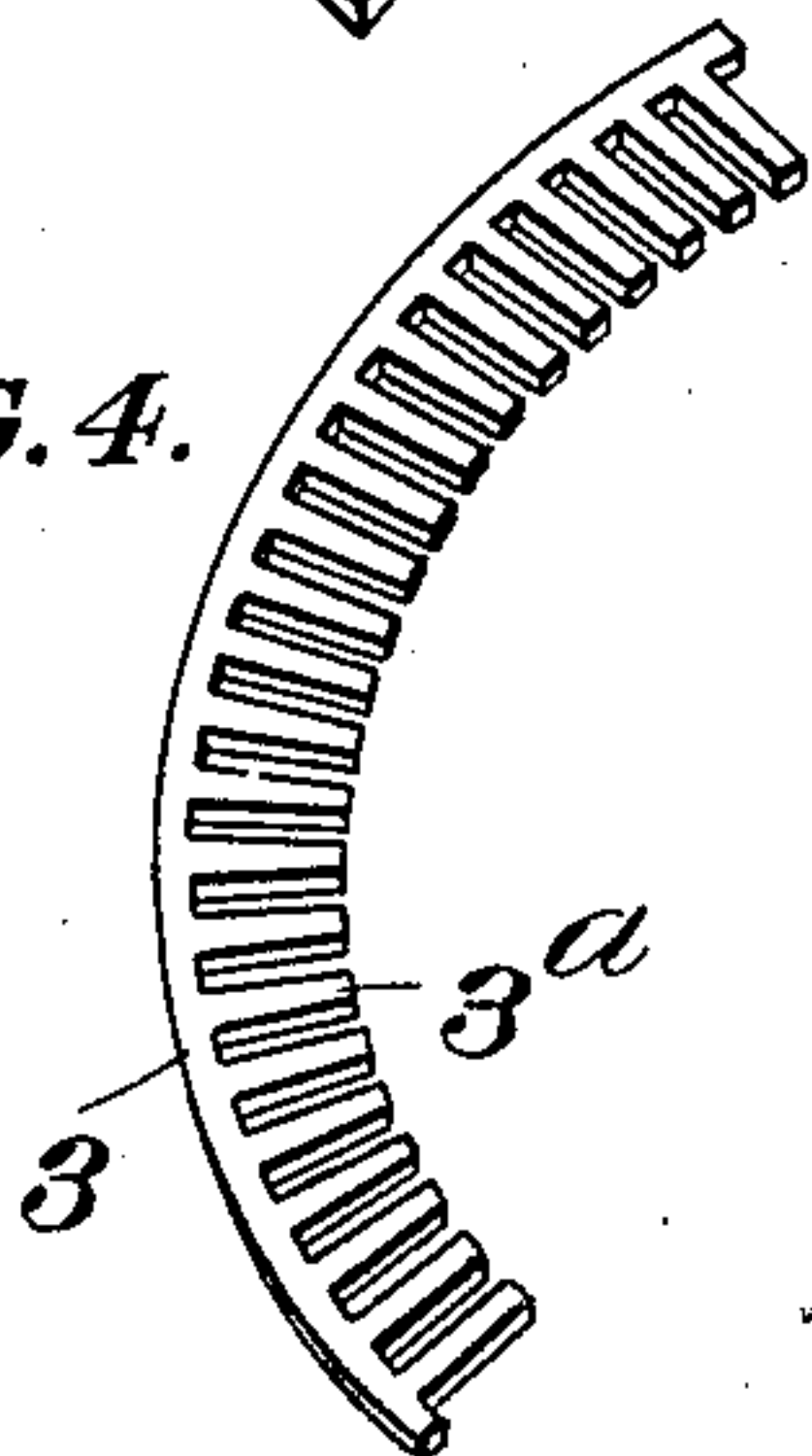


FIG. 5.

WITNESSES

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UNITED STATES PATENT OFFICE.

THOMAS H. ELLIOTT, OF SELMA, CALIFORNIA, ASSIGNOR TO SELMA FRUIT COMPANY, INC., OF SELMA, CALIFORNIA.

FRUIT-SEEDER.

934,900.

Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed February 24, 1908. Serial No. 417,533.

To all whom it may concern:

Be it known that I, THOMAS H. ELLIOTT, citizen of United States, residing at Selma, in the county of Fresno and State of California, have invented new and useful Improvements in Fruit-Seeders, of which the following is a specification.

My invention relates to fruit seeders, and especially to a process for manufacturing the toothed segments employed for the purpose of separating the seeds from the pulp of the fruit.

It consists in a process by which the pins are formed, and in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a plan view partly in section of the mold used in my process. Fig. 2 is an enlarged sectional view thereof. Fig. 3 is a perspective view of one of the blanks used for spacing the pins. Fig. 4 is a perspective view of one of the toothed segments for holding the pins in place in the mold. Fig. 5 is a sectional view illustrating the manner of removing the blanks from the pins after casting. Fig. 6 is a sectional perspective view of a portion of a seeding roll constructed according to my invention.

In apparatus for seeding fruit, what is known as the pin roll is employed, this consisting substantially of a cylinder having teeth projecting radially, said cylinder being mounted and turnable with relation to a pressure device, between which and the toothed cylinder, the fruit is passed so that the pulp will be forced into the channels between the teeth, while the seeds, being of larger diameter than the channel spaces, will be arrested upon the points of the teeth. The seeds and the pulp are subsequently removed independently of each other.

It is the object of my invention to provide a means for forming the pin rolls. These rolls are formed by casting pins into a metal matrix, and they are preferably made in short segments of such length that a set of segments will complete a circular disk or roll of a certain thickness. These rolls are then placed together side by side, with a means for interlocking them until a cylinder of sufficient length has been formed. In order to form these segments I first construct a mold A having the interior of the proper form for the desired segments. With-

in this mold is built up a structure for properly holding the pins in position until they are secured by casting molten metal around them. This is effected as follows: I first lay a thin blank 2 in the mold. This blank is preferably about half the thickness of the regular blank. I then take a segment 3 which is in the form of a curved rim having inwardly projecting teeth 3^a; this is laid upon the blank 2. I then take another blank 4, made of steel, which is a shade thicker than that of the segment 3, having the same shape; this blank is laid upon the toothed segment; then another toothed segment upon the blank, and this continuing with alternate toothed segments and blanks until the mold is filled, and the final segment blank is placed upon the last toothed segment, this segment having only half the thickness of the regular blank, and the exact thickness of the first blank. Within the spaces formed between the teeth 3^a of these alternate segments, are placed pins 6, the inner ends of which abut against the bottom of the channels between the teeth. The outer ends project inwardly toward the center or smaller curvature of the mold, and these inner ends are slightly bent, mashed, or corrugated, so that they will hold within the metal after the latter is cast.

The mold has a cap 7 which is fitted upon the upper side this cap preferably having projecting webs to fit corresponding grooves in the mold. It also has a rib 8 concentric with the exterior and interior peripheries of the mold, and of the metal matrix which is to be formed therein. This rib projecting from the cap or cover will, when the metal is cast, form a corresponding annular groove, and the opposite side of the mold will have a projecting tongue 9 which will register in position with the groove. Thus, when the sections have been cast it will be seen that they may be assembled, first, to form complete circular disks or sections, and secondly, to be united longitudinally to build up a cylinder of any desired length, the sections of which will be firmly interlocked by the engagement of the ribs and grooves which are cast therein.

Molten metal having been poured into the mold, after the parts are assembled, will flow between and around the inwardly projecting ends of the teeth, the outer ends of which lie in the grooves or channels of the teeth of the

segments 3. When the whole has properly cooled, it may be removed from the mold. It will be seen that it will be impossible to remove these parts directly since the teeth are radial, I therefore first remove the blanks, then push the teeth, which previously lie within the toothed segments, into the spaces previously occupied by the blanks. As these blanks are slightly thicker than the toothed segments, they provide a sufficient space, so that when the teeth are within these spaces, the segments can be easily removed, and the toothed segments being of slightly thinner material than the blanks, they will easily fall into the spaces after the blanks have been removed, and thus the whole of the mold, and its elements, may be separated leaving the cast metal segments, with the pins projecting therefrom, in condition for use.

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

1. A mold for forming segmental sections with radially disposed pins projecting therefrom, said mold having circular segments fitting its inner periphery, and said segments having radial pin-holding slots on the inner peripheries, plain segments of greater thickness located between the slotted segments, and exterior plain segments between the outer series of slotted segments, and the sides of the mold.

2. In a device for casting segmental sections, with radial pins projecting from their peripheries, a mold, circular segments fitting against the inner periphery of the mold, with radial pin-holding slots on the inner peripheries of the segments, and plain segments located between the slotted segments, and between said segments and the sides of the mold.

3. In an apparatus for casting segments with radially projecting pins, pin-holding members consisting of segmental plates hav-

ing radial slots in the inner periphery, and plain segmental plates located upon each side of the slotted plates.

4. In a mold of the character described, a hollow mold member, thin circular segments, forming the outer periphery of the mold chamber, each alternate segment made thinner than the intermediate ones, and having pin-holding slots in its inner edge, a cap member forming with the mold a metal receiving chamber into which the free ends of the pins project, and plain segmental plates interposed between the pin-holding segments and the sides of the mold.

5. In a mold of the character described, a hollow mold member, thin circular segments forming the outer periphery of the mold, each alternate segment made thinner than the intermediate ones and having pin-holding slots in their inner edges, exterior plain plates between which the peripheral plates are held, a cap forming with the mold an interior metal receiving chamber into which the free ends of the pins project, and a concentric groove, and a corresponding rib on the inner sides respectively of the mold and cap.

6. In a mold of the character described, a mold chamber and a cap with corresponding projections and depressions on their inner sides, peripheral thin segments, each alternate segment made thinner than the contiguous ones, and having equally spaced radial pin-holding slots on its inner edge, and exterior plain plates, acting with the mold sides to clamp the pin-holding segments in place.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THOMAS H. ELLIOTT.

Witnesses:

F. O. STEPHENSON,
NELLIE M. WENTY.