

**No. 669,028.**

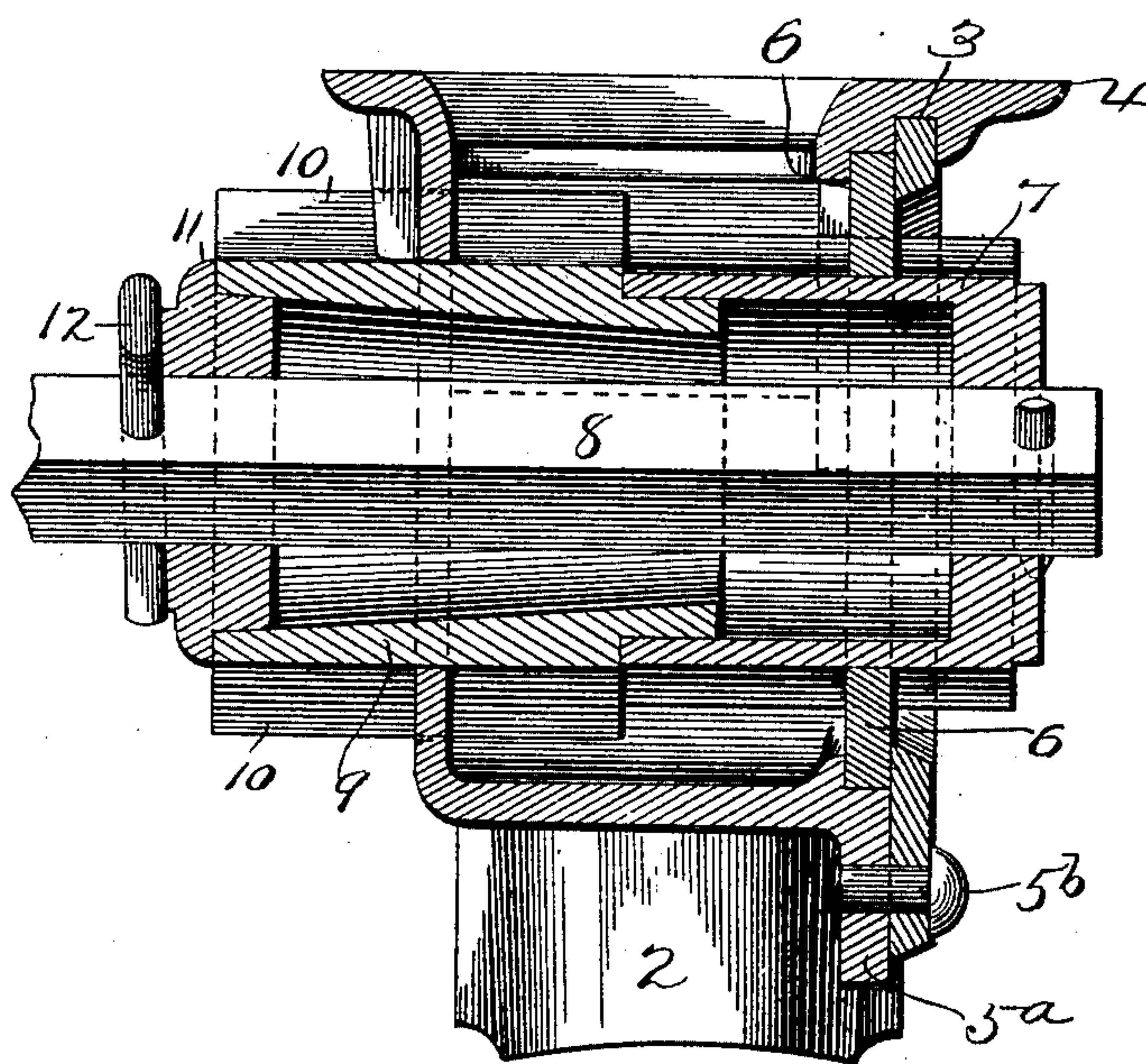
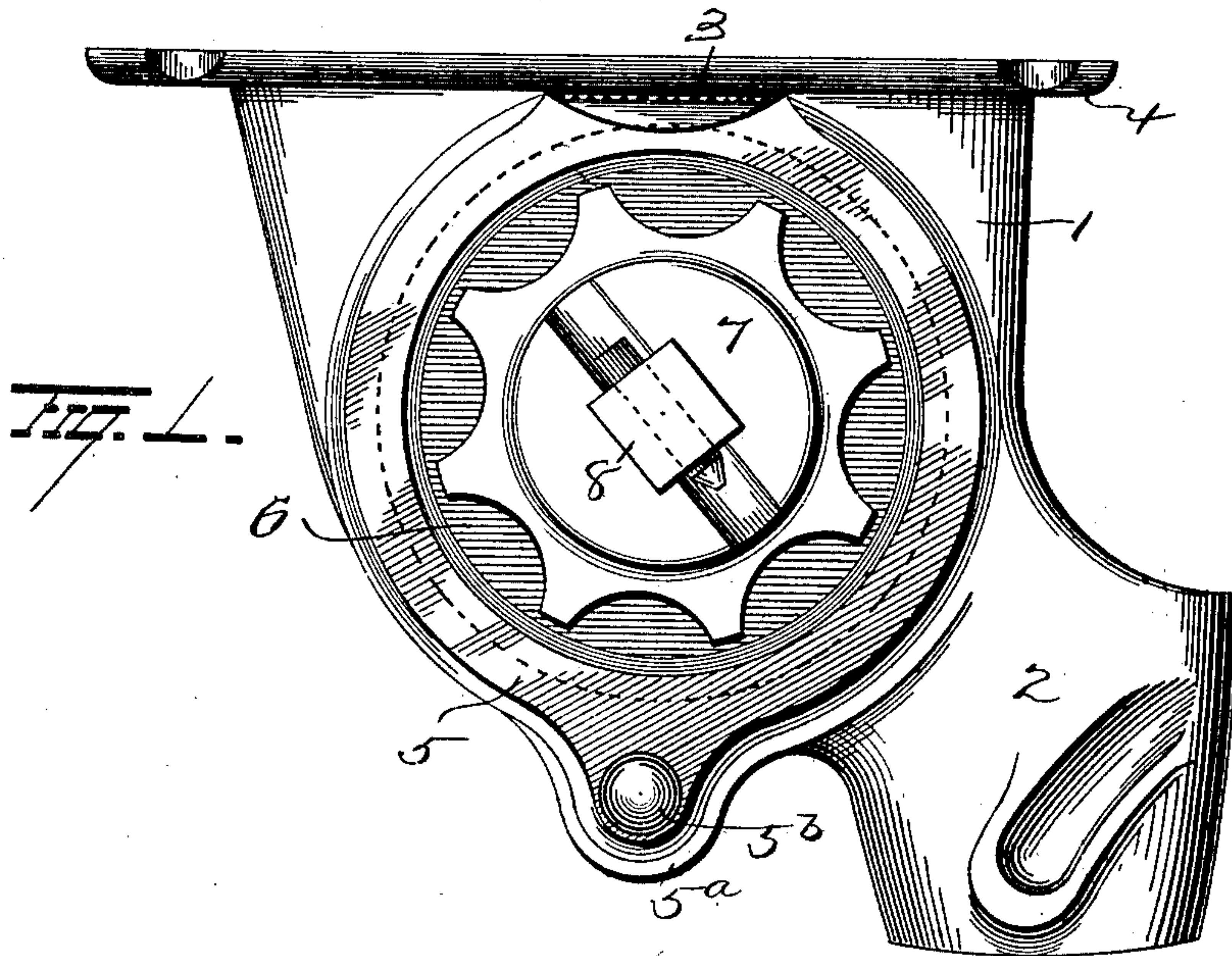
**Patented Feb. 26, 1901.**

**B. E. EDWARDS.**  
**FORCE FEED SEEDING MACHINE.**

(Application filed Oct. 20, 1900.)

(No Model.)

2 Sheets—Sheet 1.



*WITNESSES*

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**INVENTOR**

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FIG. 3.

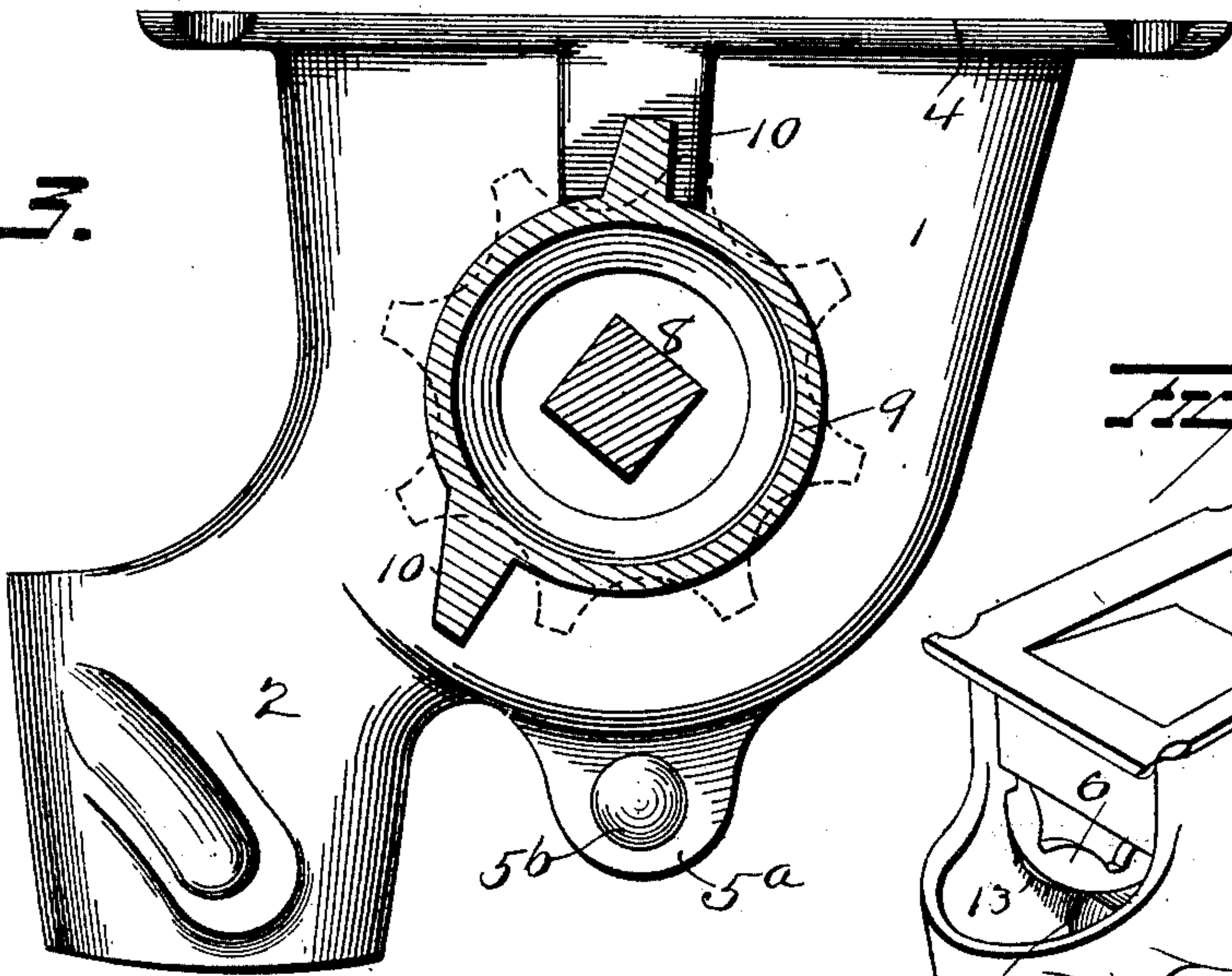


FIG. 5.

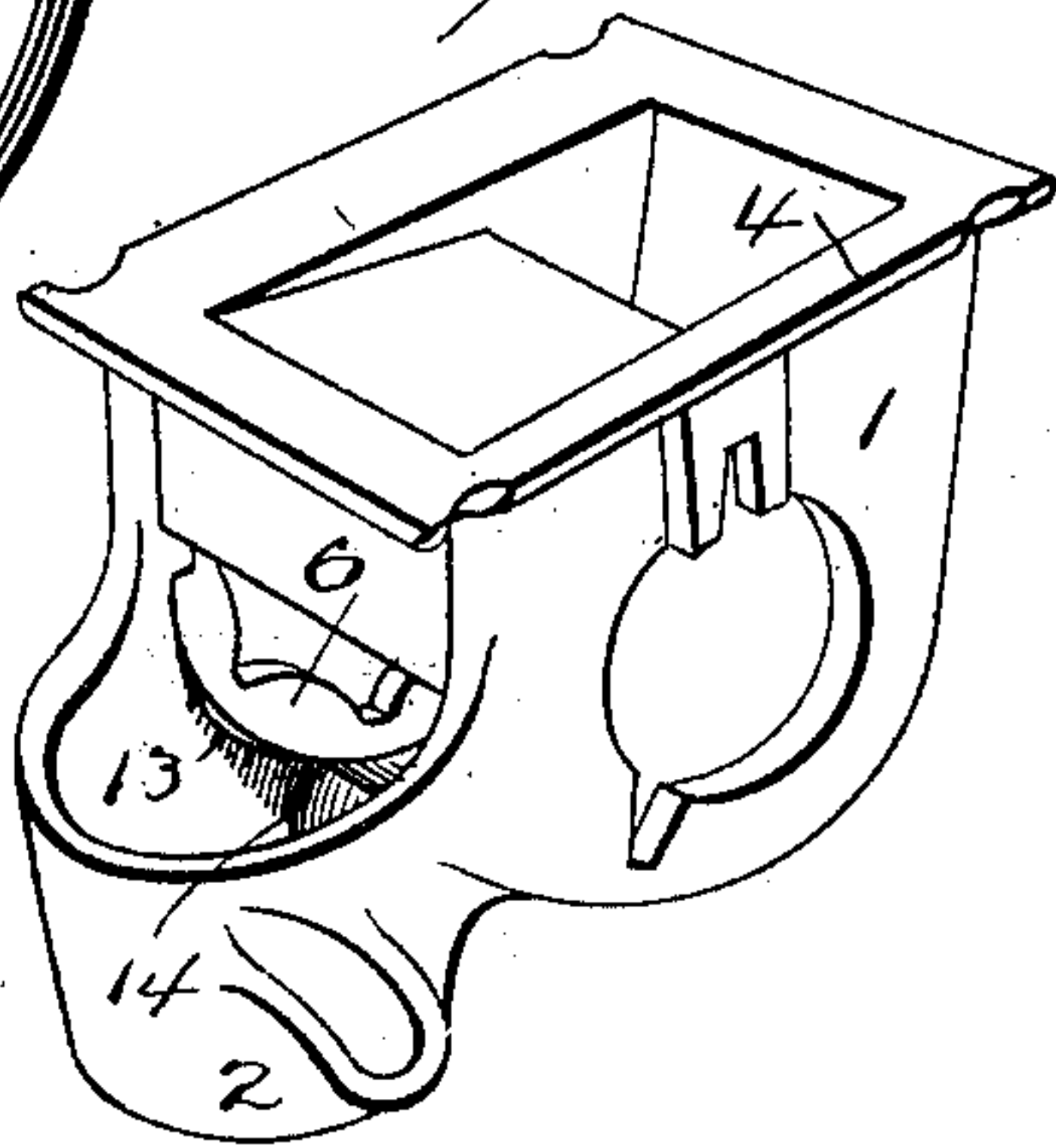
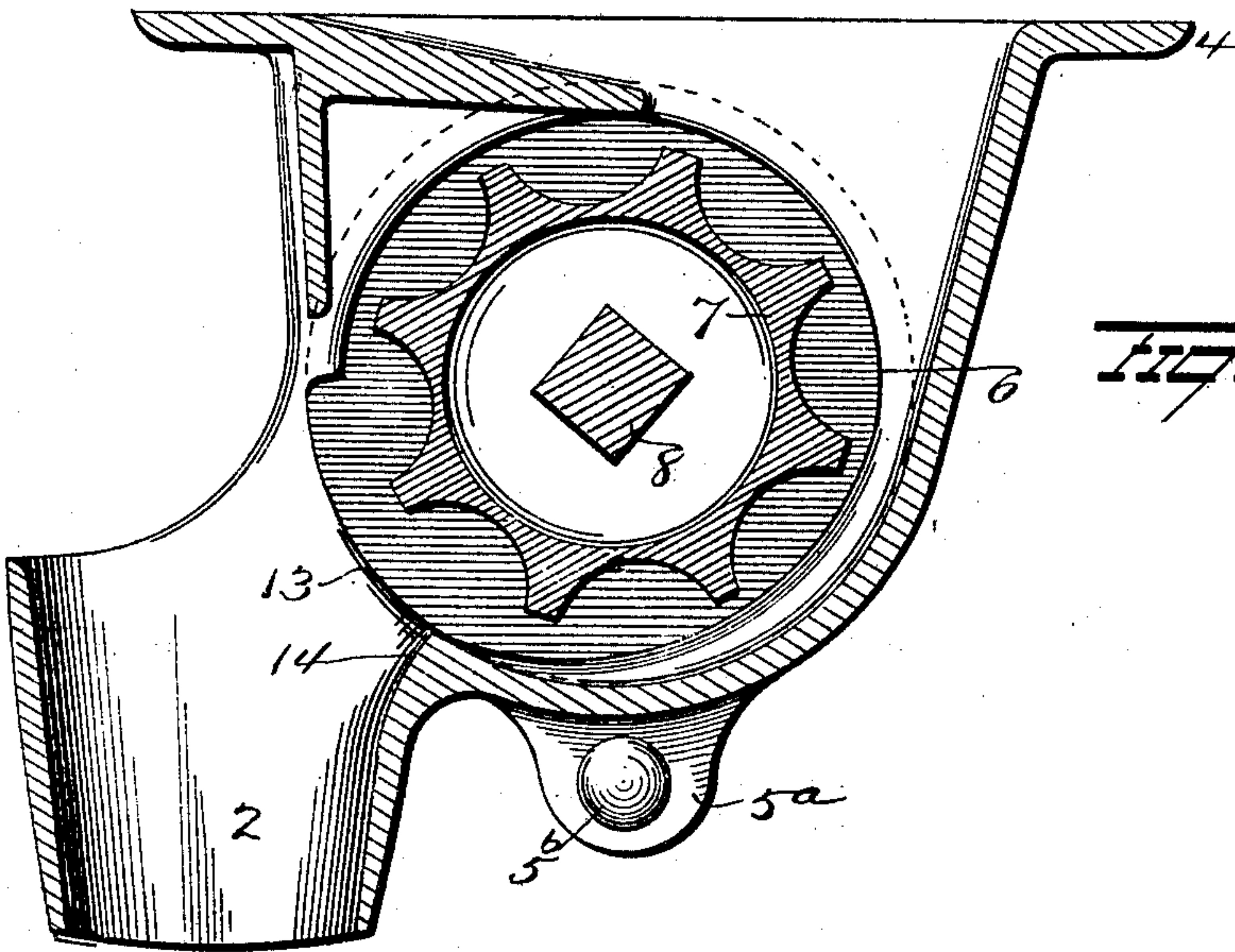


FIG. 4.



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# UNITED STATES PATENT OFFICE.

BENJAMIN E. EDWARDS, OF LA CROSSE, WISCONSIN, ASSIGNOR TO THE  
FOUNTAIN CITY DRILL COMPANY, OF SAME PLACE.

## FORCE-FEED SEEDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 669,028, dated February 26, 1901.

Application filed October 20, 1900. Serial No. 33,714. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN EUGENE EDWARDS, of La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Force-Feed Seeding-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in force-feed seeding-machines, one object of the invention being to provide a device of this character in which any seed or dirt which may be drawn into the bearing for the rose-washer thereof will be effectually discharged.

A further object is to provide a device of this character which will permit of the ready repair of the rose-washer in case of accident thereto.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation, illustrating my improvements. Figs. 2, 3, and 4 are views in section of the same, and Fig. 5 is a perspective view of the cup or case.

1 represents a seed-cup provided with a flange 4 around its upper edge, adapted to be secured to the bottom of the seedbox by any approved means, so as to communicate with an opening therein through which the seed is fed to the cup. The cup 1 is preferably made from a single casting having an integral discharge-spout 2, which latter is grooved in opposite sides for the reception of internal lugs on a grain-receiver, (not shown,) whereby the latter is securely though removably connected to the seed-cup.

A groove 3 is provided in the lower face of flange 4 at one side of the seed-cup for the reception of the upper end of a ring 5, which latter is secured to a depending ear 5<sup>a</sup> on the lower end of the cup by a rivet 5<sup>b</sup>, as shown, said ring being adapted to hold the rose-washer 6 in its grooved seat in cup 1, but permit of its ready removal in case of accident. The rose-washer 6 is made with a hole corre-

sponding with the fluted circumference of the feed-wheel 7, which latter is made with a fluted periphery, so as to convey a given quantity of seed without crushing it, and is secured on a shaft 8 against a cylindrical shell 9, having webs or flanges 10 on opposite sides thereof adapted to be moved through an opening in the side of the cup corresponding to the shape of the shell and webs to cut off the passage of seed through the cup or regulate the size of the passage for the seed. The shell 9 is loosely mounted on shaft 8 and held against the feed-wheel by a ring 11 and pin 12, as shown.

One side of the seed-cup is cut away or beveled on its inner face at the discharge-point thereof, as shown at 13, so as to expose the entire edge of the rose-washer, thus permitting any ground seed or dirt which may be drawn into the bearing of the washer by the rotary movement of the same to escape at the grooved or beveled portion 13 and not be carried around and around in the bearing to choke and bind the same, and hence prevent the perfect operation of the feed. The beveled portion 13 of the bearing for washer 6 exposes the entire edge of the washer at one place, and the bearing from this point widens until the edge of the washer is entirely inclosed, thus forming, in effect, an inclined scraper on the edge of the washer to remove any foreign matter therefrom, and a groove 14 is provided in the spout 2, communicating with the beveled portion 13, to receive the ground seed and foreign material from the washer-bearing and direct it into the seed-receiver.

Various slight changes might be resorted to in the general form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I would have it understood that I do not wish to be limited to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. The combination of a seed-cup, a rose-



washer having a bearing in said cup, the said bearing in the cup cut away or beveled on its inner face coincident with the discharge-outlet of the cup to expose the edge of the rose-washer and a feed-wheel mounted in said washer.

2. The combination of a seed-cup having a bearing therein, a rose-washer mounted in said bearing, and a ring connected at the lower end of said cup and held in a groove at the upper end of the cup.

3. The combination of a seed-cup, a discharge-spout connected thereto and having a groove therein, a bearing in the seed-cup and a ring in said bearing in which the rose-washer is mounted, the said cup made with a beveled recess on its inner face at the discharge end thereof to expose a portion of the periphery of the rose-washer and communicating with the groove in the discharge-spout and adapted to permit the escape of ground seed or dirt from the bearing of the rose-washer.

4. The combination of a seed-cup and a discharge-spout, the latter having a groove in its inner face nearest the bottom of the cup, and a rose-washer mounted in the cup and having its peripheral wall exposed as it passes the opening in the cup coincident with the outlet-spout.

5. The combination of a seed-cup, a rose-washer, and a bearing in the cup for the feed-washer and constructed to embrace and inclose the peripheral portion of the rose-washer, said bearing cut away coincident to the discharge-outlet of the cup to expose the peripheral wall of the rose-washer as it passes said discharge-outlet.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

BENJAMIN E. EDWARDS.

Witnesses:

F. E. MARSH,  
F. H. HANKERSON.