

No. 624,021.

Patented May 2, 1899.

G. A. HEATH.  
SEED CUP.

(Application filed Mar. 15, 1899.)

(No Model.)

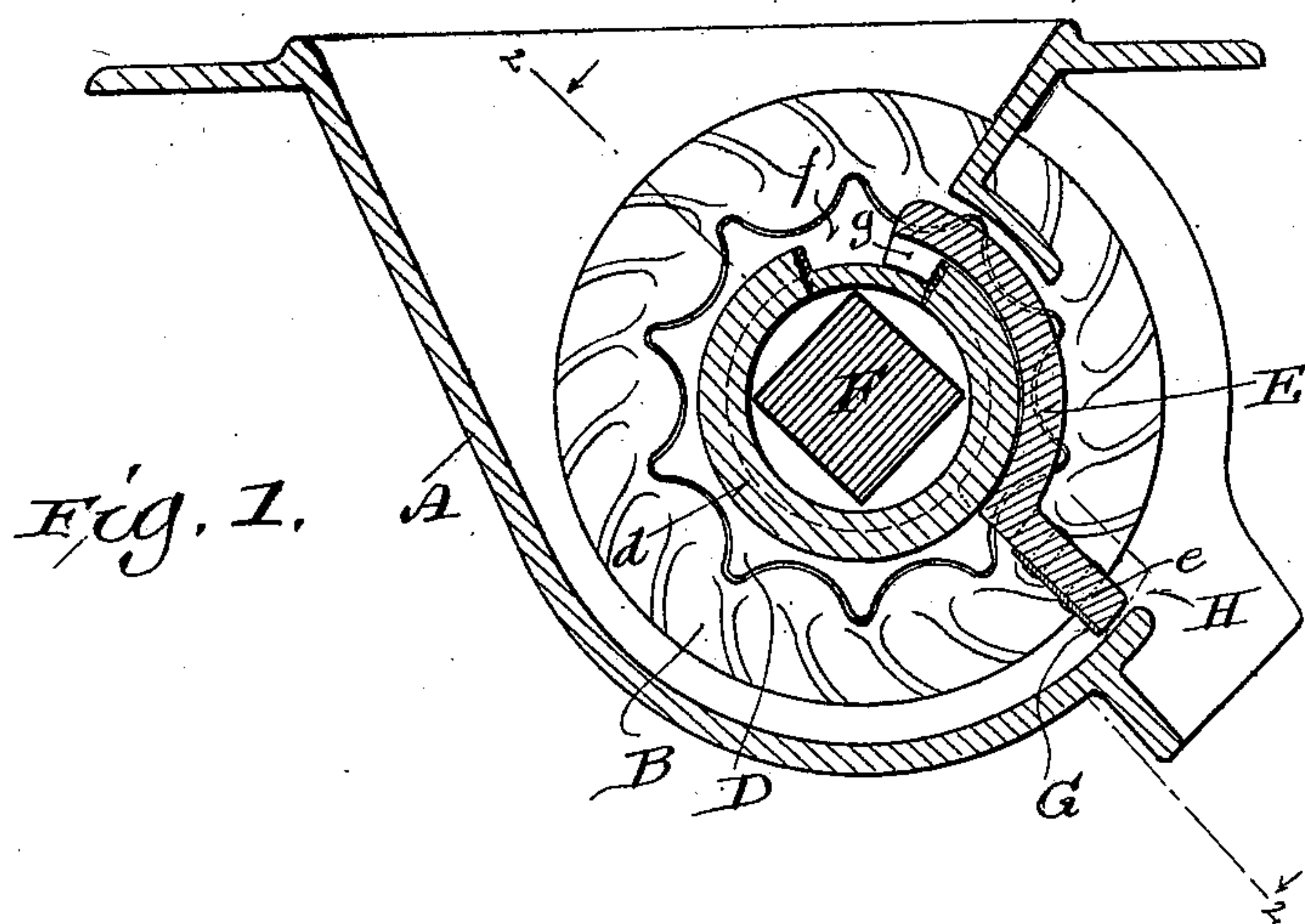


Fig. 2.

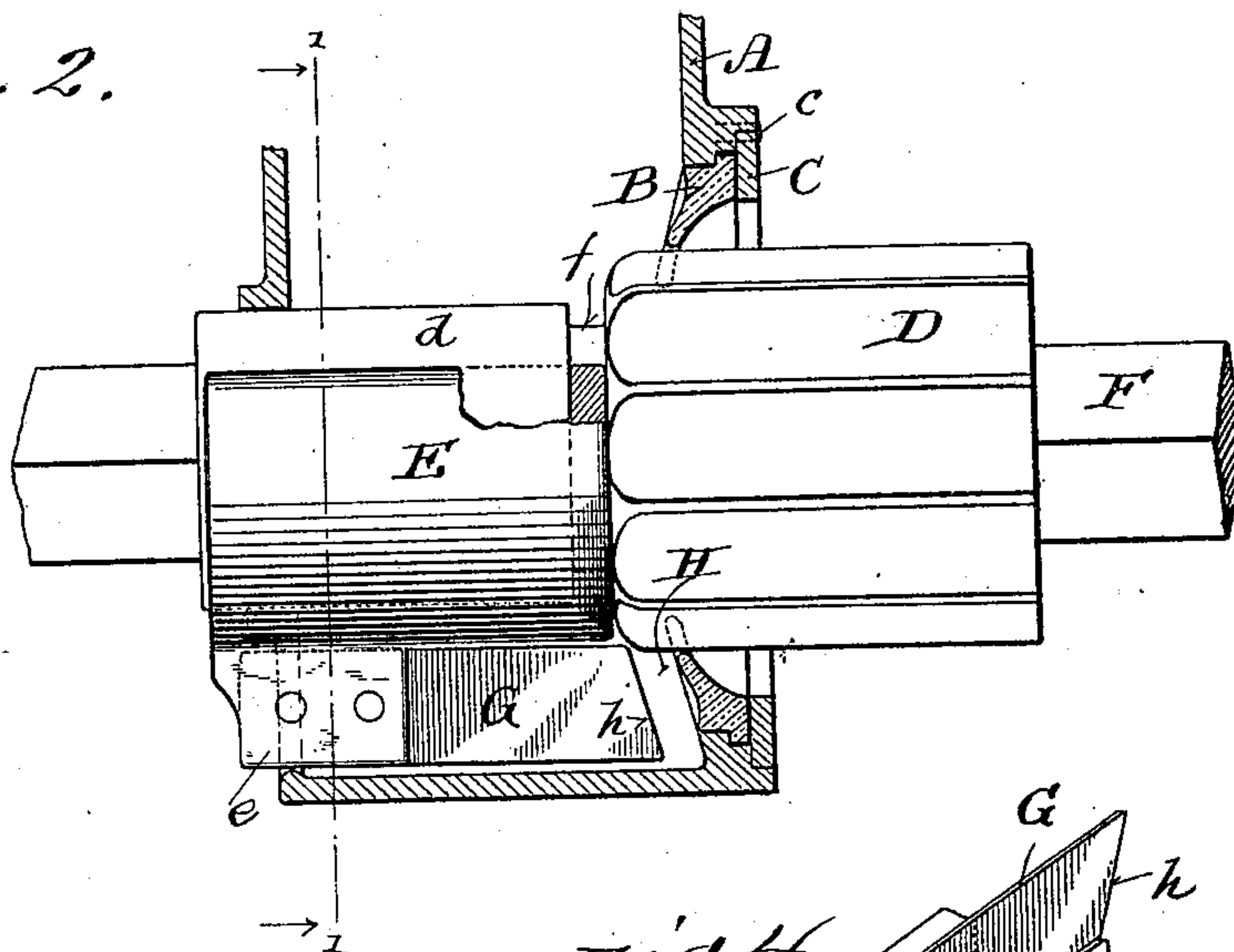


Fig. 3.

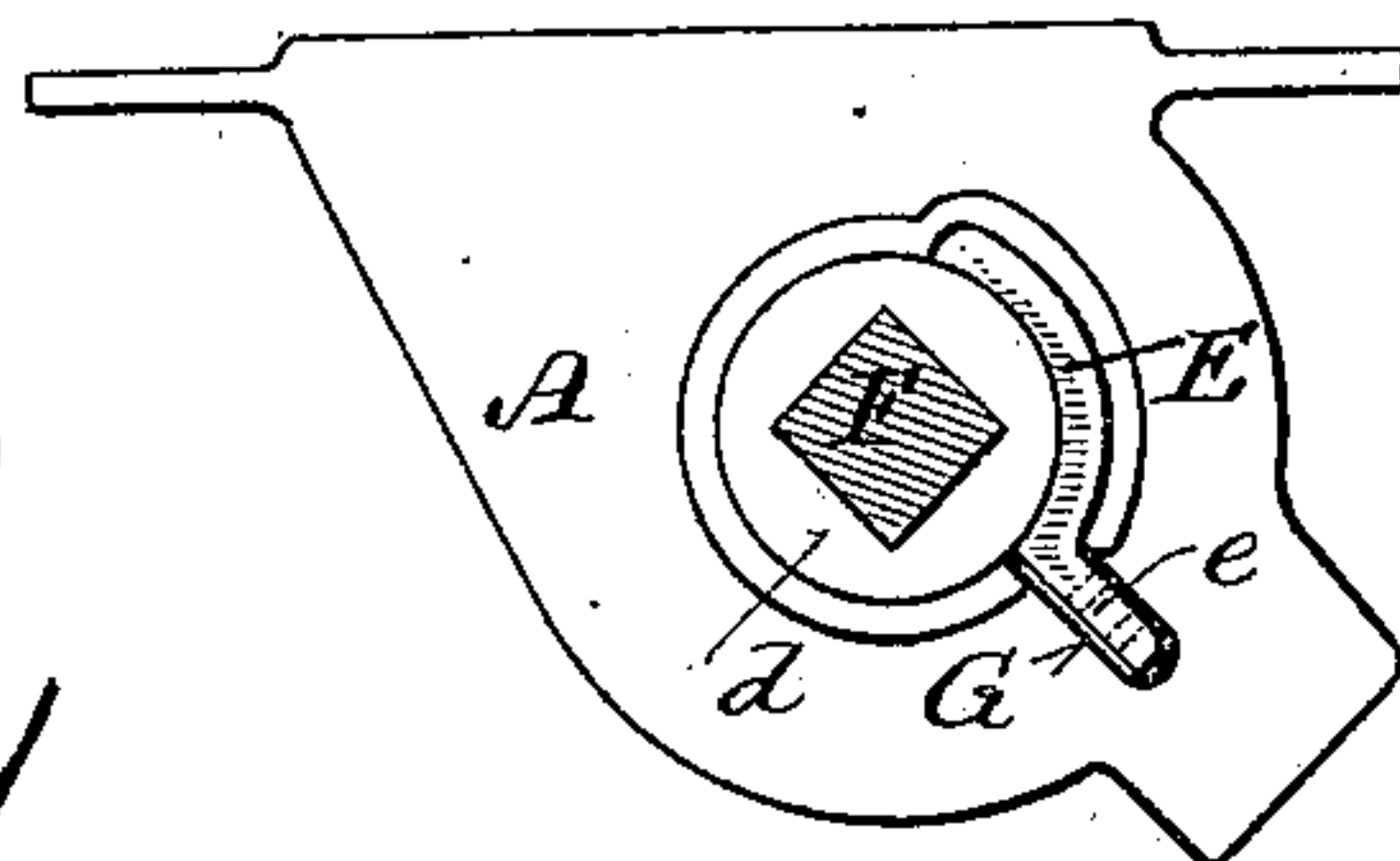
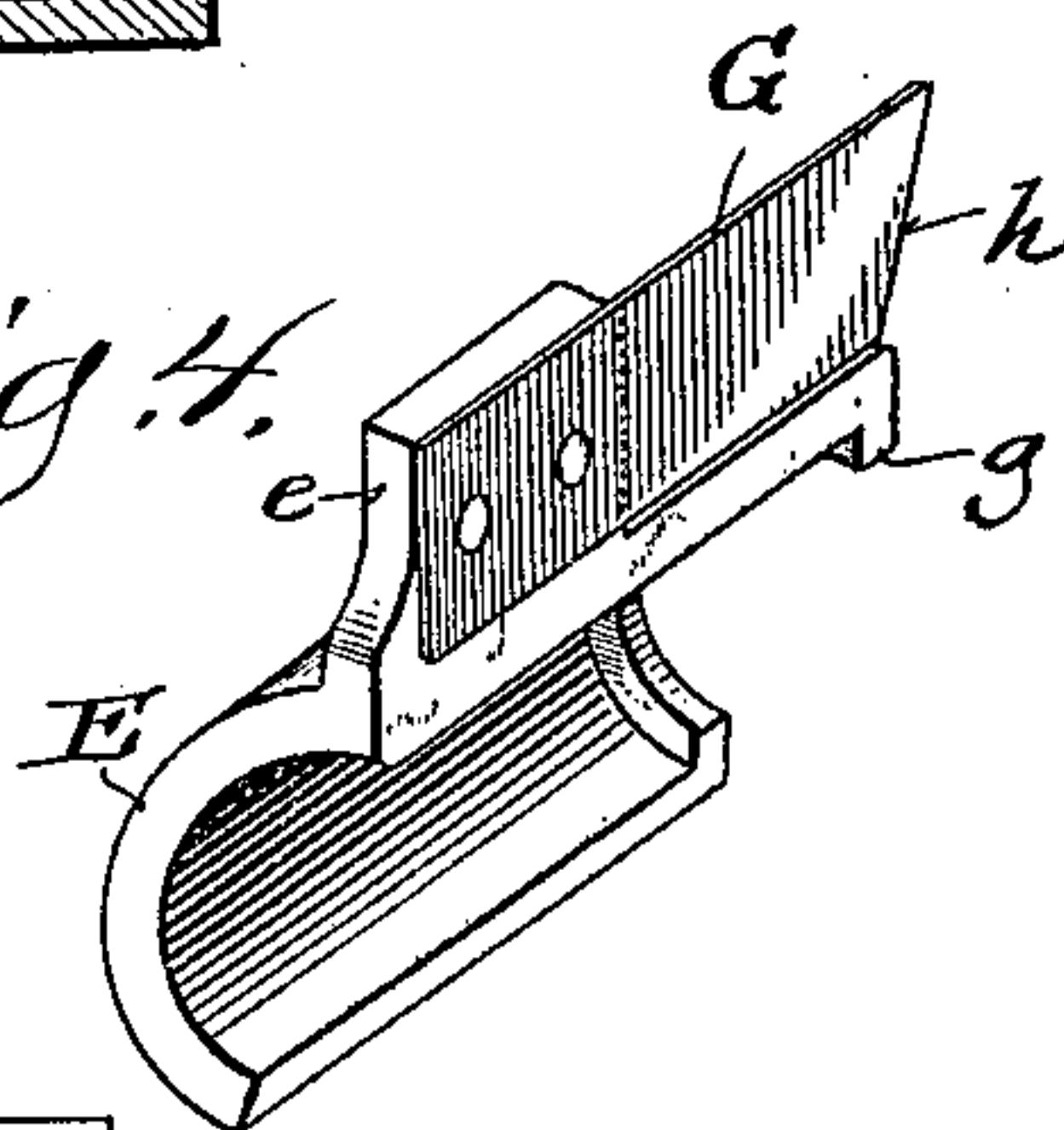


Fig. 4.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

GEORGE A. HEATH, OF WAUPUN, WISCONSIN.

## SEED-CUP.

SPECIFICATION forming part of Letters Patent No. 624,021, dated May 2, 1899.

Application filed March 15, 1899. Serial No. 709,125. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE A. HEATH, a citizen of the United States, and a resident of Waupun, in the county of Dodge and State of Wisconsin, have invented certain new and useful Improvements in Seed-Cups; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to the seed-cups of seeders and drills, with especial reference to such as are employed in sowing peas and similar seed; and it consists in certain peculiarities of construction and combination of parts whereby said seed is adapted to be sowed without being broken or injured, all as will be fully set forth hereinafter and subsequently claimed.

In the drawings, Figure 1 is a vertical sectional view, on the line 1 1 of Fig. 2, of a seed-cup embodying my present invention. Fig. 2 is a view of said cup, partly in elevation and partly in section, on the line 2 2 of Fig. 1. Fig. 3 is a view in end elevation of said device on a reduced scale, and Fig. 4 is a perspective view of my improved feed-gate removed from the seed-cup and inverted.

Referring to the drawings, A represents the seed-cup, formed, preferably, of cast or malleable metal. The sides of this cup have openings therethrough, that on one side being a circular shouldered opening to receive a revoluble annular disk B, held in place by a ring C and suitable keys or pins *c*. The interior of this annular disk B is corrugated or fluted to correspond to and receive the fluted feed-cylinder D, while the opening through the opposite side of the cup is also circular, but of less diameter than the first-named opening, to receive the smooth or non-fluted end *d* of the cylinder D, the said smaller opening being segmentally enlarged and having a radial extension to receive the feed-gate E *e*. The cylinder D *d* has a square bore therethrough for the reception of the cylinder-shaft F, which latter is rigidly secured to said cylinder D *d*, the latter having a circumferential groove *f*, located between the fluted and smooth portions of its periphery, to receive a lug *g* on the inner end of the portion E of the feed-gate, while to the part *e* of said gate there is secured a tongue G, consisting of a flat spring or yielding and elastic strip of metal, having

an oblique free end *h* corresponding to the inner inclination of the adjacent face of the annular disk B, whereby said cylinder D *d* may be moved longitudinally by its shaft F through the seed-cup A back and forth, the spring G of the feed-gate thus closing the outlet of the seed-cup or opening it to the distance required in any case, according to the quantity of seed to be sowed to the acre.

Heretofore seed-cups of the general class herein illustrated and described have been used employing a fluted feed-cylinder and a sliding feed-gate; but said gate being rigid and unyielding the result has been that when peas, beans, corn, and similar seed were attempted to be sowed therewith a large proportion of the seed was caught between the fluted cylinder and the end of the feed-gate and split, broken, and rendered worthless, so that the said devices had to be abandoned; but with my improved device when the seed is brought up to the outlet H by the fluted cylinder D the adjacent end of the gate-spring G will yield and vibrate, thus freeing the seed and enabling the same to be sowed freely and without injury.

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

1. In a seed-cup for seeders and drills, the combination with a revoluble feed-cylinder of a longitudinally-movable yielding vibratory feed-gate.

2. The combination with a seed-cup having openings through the opposite sides thereof and a suitable outlet, of a longitudinally-movable and revoluble feed-cylinder having a fluted and a smooth cylindrical portion, and a feed-gate connected to said feed-cylinder to move longitudinally therewith but incapable of revolution and having a yielding vibratory tongue secured thereto and projecting therefrom across said outlet.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

GEORGE A. HEATH.

Witnesses:

H. G. UNDERWOOD,  
B. C. ROLOFF.