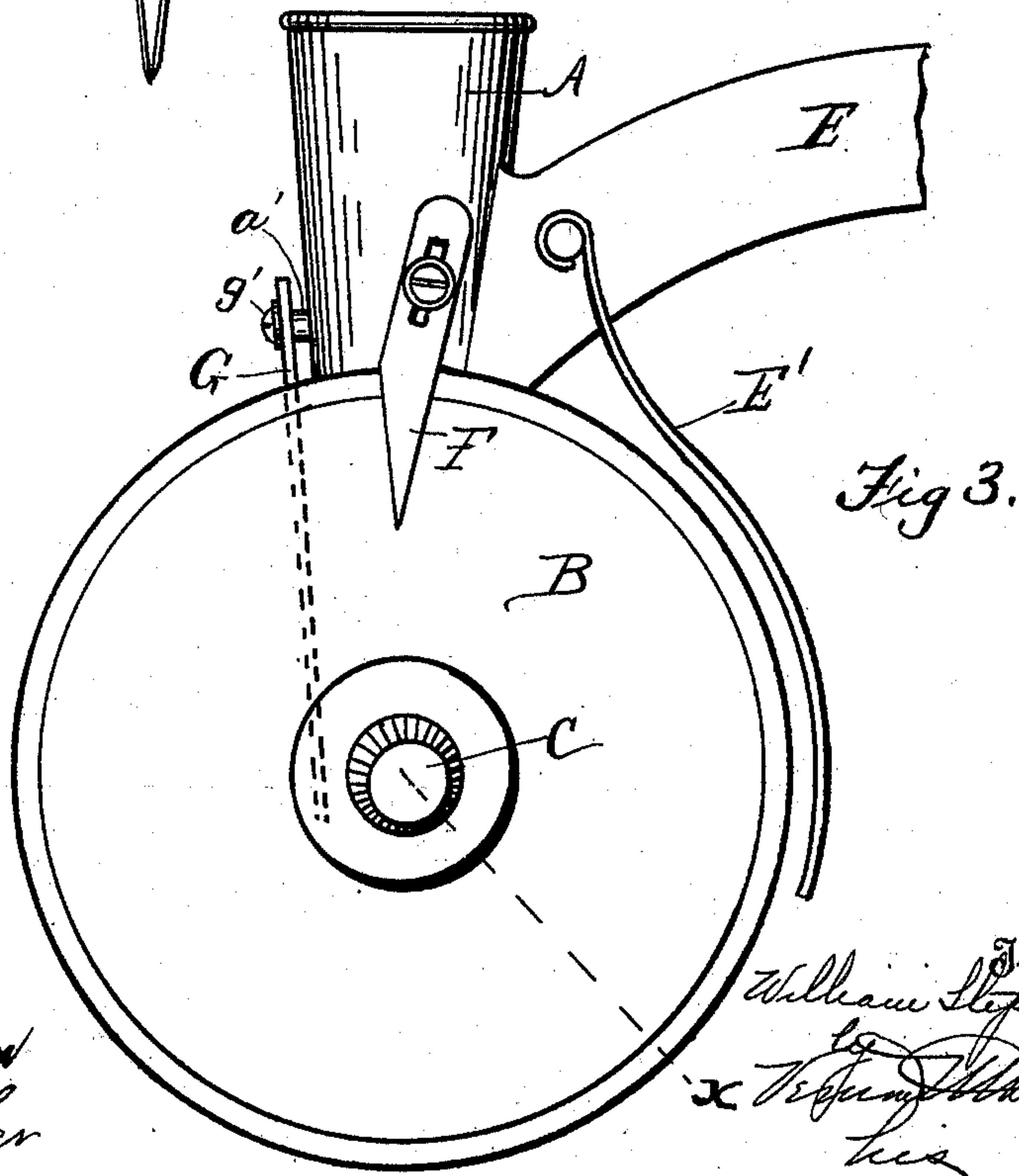
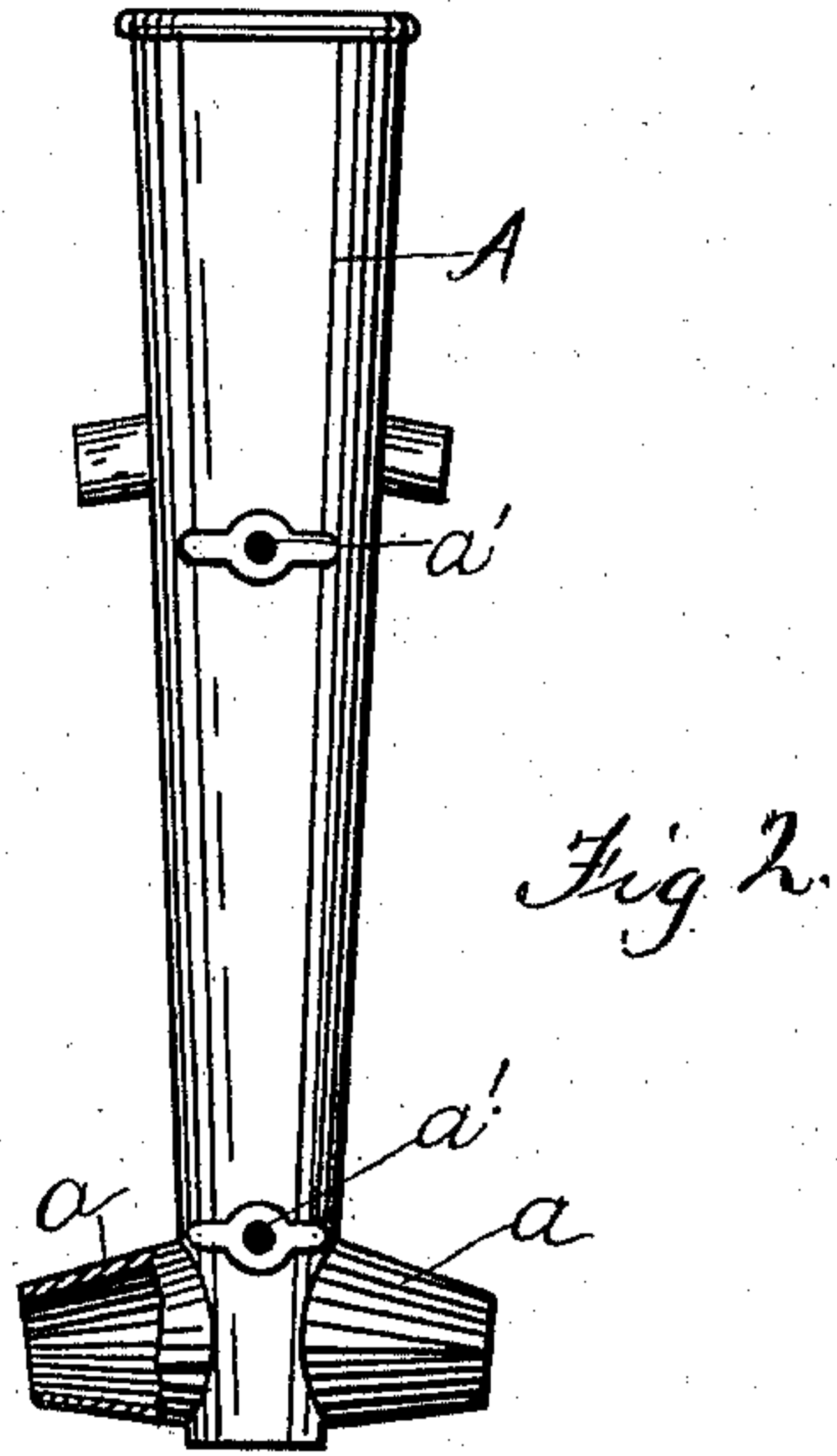
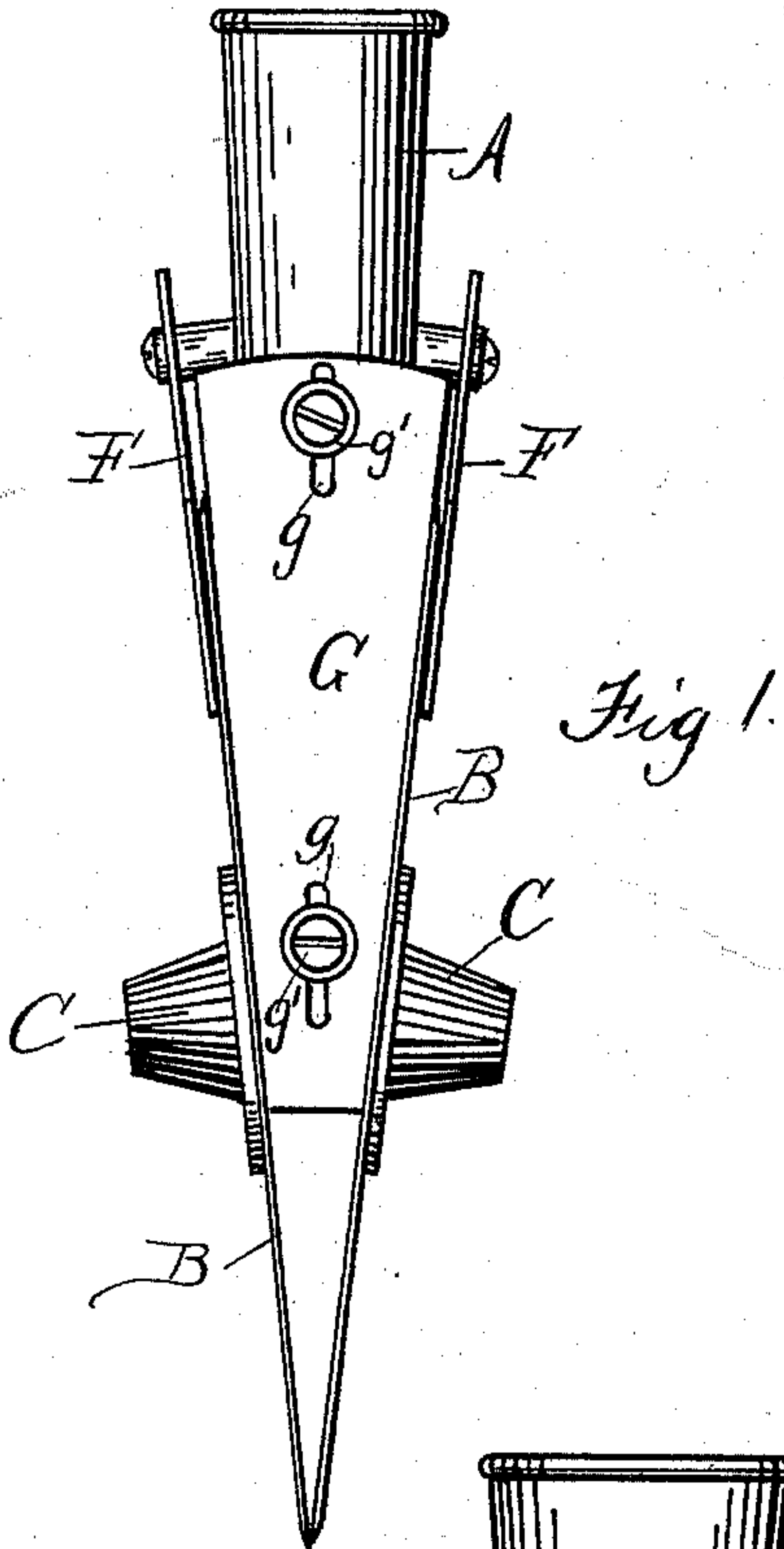


(No Model.)

W. STEPHENSON  
SEED DRILL.

No. 603,862.

Patented May 10, 1898.



Witnesses  
*A. J. Hobson*  
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# UNITED STATES PATENT OFFICE.

WILLIAM STEPHENSON, OF MORRIS, CANADA.

## SEED-DRILL.

SPECIFICATION forming part of Letters Patent No. 603,862, dated May 10, 1898.

Application filed March 28, 1895. Serial No. 543,467. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM STEPHENSON, a citizen of the Dominion of Canada, residing at Morris, in the county of Provencher, in the Province of Manitoba, Dominion of Canada, have invented certain new and useful Improvements in Seed-Drills, of which the following is a full, clear, and exact specification.

My invention relates to that class of seed-drills wherein a furrow for the seed is opened by means of converging disks; and it has for its object to provide a simple and efficient scraper for the inner sides of the opposite disks which shall be capable of adjustment in its bearing thereon; and for these purposes it consists in the construction, arrangement, and combination of the several parts of which it is composed, as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, in which corresponding parts are designated by corresponding marks of reference, Figure 1 is a rear view of a seed-drill having my invention applied thereto. Fig. 2 is a rear view of the grain-spout, with the central scraper removed. Fig. 3 is a side elevation of the drill shown in Fig. 1.

From the following description of my invention it will be seen that it is capable of application to any suitably-constructed seed-drill; but I shall in the following specification describe my invention as applied to a seed-drill similar to that shown in Letters Patent No. 588,027, granted to me August 10, 1897. In such a construction a suitable grain-spout A has upon each side of its lower end a suitable axle  $a$ , the axles being formed at an angle to each other, so that the disks B, having the hubs C, carried by the said axles, converge toward their lower edges. A suitable draw-bar E is secured to the grain-spout, and may have a suitable mud-guard E', supported thereby, in front of the disks to prevent the entrance therebetween of stones, mud, &c., as they revolve. Any suitable scrapers F may also be provided to clear the outer surfaces of the disks from the adhering mud.

The central adjustable scraper G has a slot or slots  $g$  therein, through which screws  $g'$  may be inserted to secure it upon the grain-spout. The scraper is tapered in contour, the angle formed by the sides thereof being substantially the same as the angle formed by the opposite disks, and it will be thus seen that an adjustment of the scraper vertically on the grain-spout by means of the slots  $g$  and screws  $g'$  to or from the converging point of the disks will cause a corresponding variation in the bearing of the scraper and vary the pressure between its opposite sides and the opposite disks, so that the said scraper may be readily adjusted for different conditions of service.

If desired, suitable lugs  $a'$  may be formed on the rear of the grain-spout to receive the screws  $g'$ , and it will also be seen that while the scraper is herein shown as adjusted vertically (the converging point of the disks being at about  $x$ ) the direction of the adjustment of the scraper may be varied, it being merely required that the movement thereof causes a similar variation in pressure between the scraper and the opposite disks.

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

In a seed-drill, the combination of a grain-spout, revolving disks mounted upon the opposite sides thereof, and a tapered scraper adjustably mounted upon the grain-spout and between the disks, the said disks revolving in intersecting planes, whereby the adjustment of the scraper vertically regulates the bearing of the scraper on the inner faces of both of the said disks, substantially as described.

Dated at Hamilton, Ontario, this 11th day of February, 1895.

WM. STEPHENSON.

In presence of—  
WM. BRUCE,  
W. GRAY.