

(No Model.)

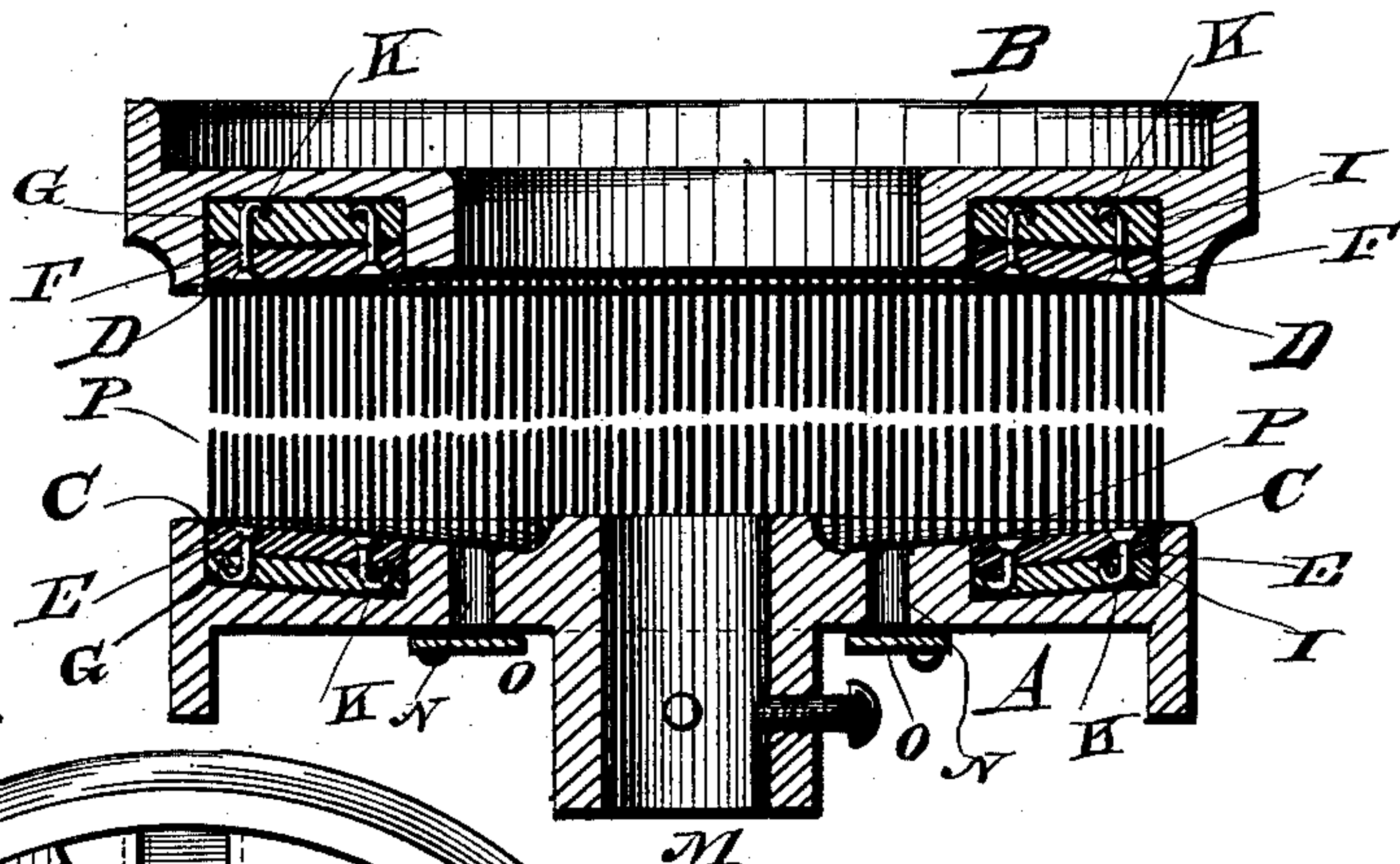
W. E. SERGEANT.

GRAIN CLEANER.

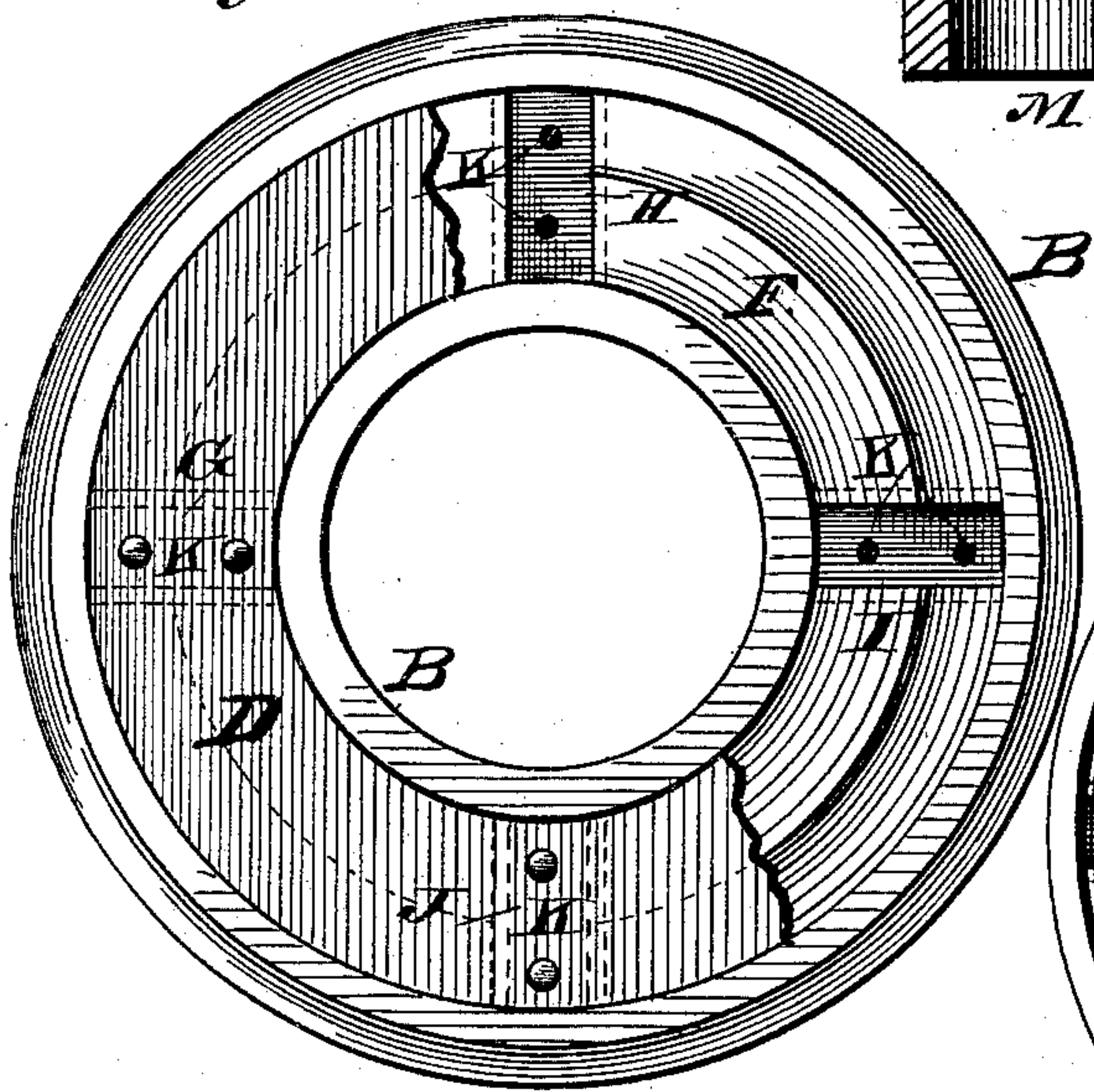
No. 358,077.

Patented Feb. 22, 1887.

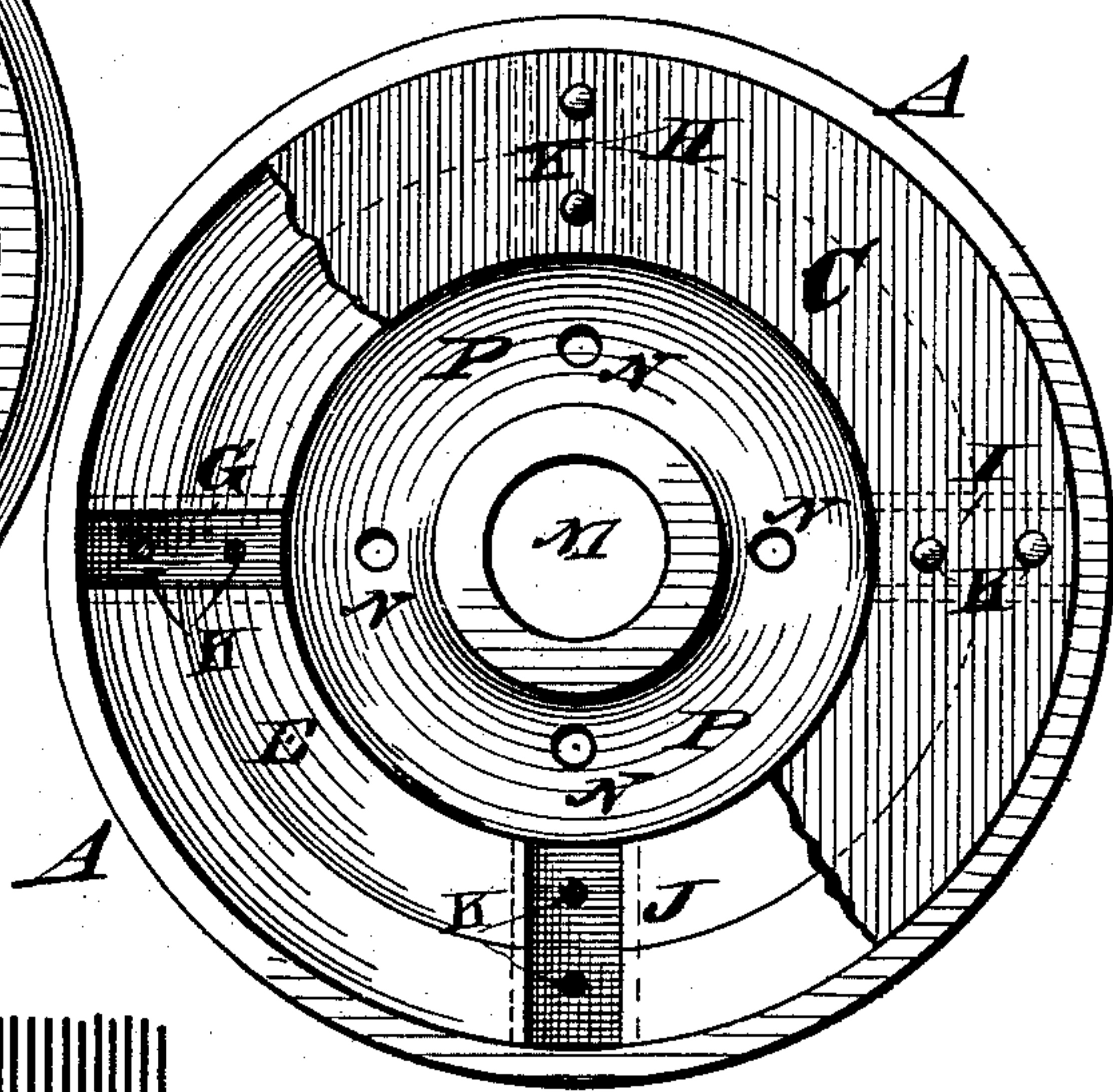
*Fig. 1.*



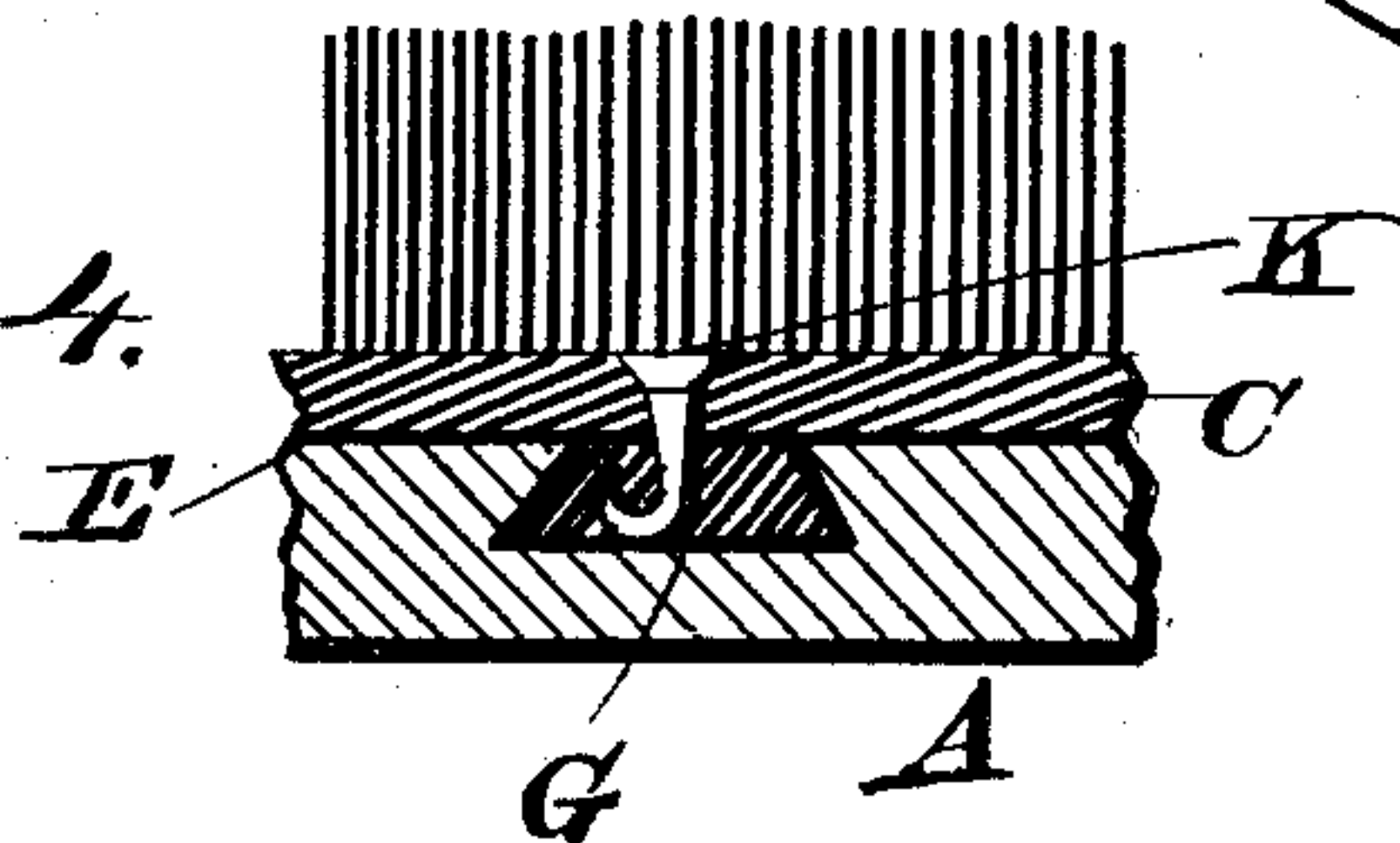
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES

*Phil. Massi.*  
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INVENTOR

*Wells E. Sergeant*  
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# UNITED STATES PATENT OFFICE.

WELLS ELY SERGEANT, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF TO JACOB H. COOK, OF SAME PLACE.

## GRAIN-CLEANER.

SPECIFICATION forming part of Letters Patent No. 358,077, dated February 22, 1887.

Application filed April 3, 1886. Serial No. 197,697. (No model.)

*To all whom it may concern:*

Be it known that I, WELLS ELY SERGEANT, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Grain-Cleaners; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical section of my improved grain-cleaner. Fig. 2 is an inverted plan of the stationary disk. Fig. 3 is a plan view of the rotating disk. Fig. 4 is an enlarged sectional detail of the disk, the brush, its leather, and securing-tacks.

My invention relates to grain cleaners; and it consists in the construction and novel combination of parts, as hereinafter set forth, and pointed out in the claims.

Referring by letter to the accompanying drawings, A designates the rotating disk, and B the stationary disk, of a grain-cleaner, the said stationary disk being secured to the casing of an ordinary grain-cleaning machine.

C and D are the annular rings of leather, which are provided with brushes and let into annular seats E and F in the adjacent faces of the rotating and stationary disks. The annular seats E and F are provided with radial recesses G H I J, having dovetailed sides, and in these recesses lead or Babbitt metal is run to fill them flush with the faces of the annular seats to receive the securing-tacks.

The leathers C D, which carry the brushes, are fastened in place by tacks K, which are driven through them and through the lead or Babbitt metal. The lower wall or bottom of the recesses in the disks turns the points of the tacks and thus clinches them. Cement may be also employed to hold the brushes firmly.

The disk A is provided with an axially-bored hub, M, around which holes N are made, and these holes or draft-apertures N are covered by valves O, to regulate the draft through the machine.

The leathers may be made in one annular piece, or they may be made in two or more arcs, as may be desired.

The bosom of the stationary disk is slightly depressed or inclined toward the center to assist the passage of the grain.

The brushes may be composed of steel bristles, jute, or any other suitable material.

In operation, the flanges of the stationary disk being secured to the perforated casing of a grain-cleaner, the brushes thereof will be held in a fixed position, and the disk A being secured to the usual vertical shaft, it will be seen that the two opposing brushes act upon the grain, which is fed through the opening in the stationary disk by means of a hopper or other feeder.

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

1. The combination of the rotating disk provided with the annular seat, the leather and brushes secured therein, the draft-apertures, and the valves, with the stationary disk provided with a dished bosom, and the brushes, substantially as specified.

2. The combination, with the iron disk having the annular seat, with radial dovetailed recesses filled with soft metal, of the leather and brushes, and tacks driven through the leather and soft metal and clinched by the iron of the disk, substantially as specified.

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

WELLS ELY SERGEANT.

Witnesses:

JACOB N. COOK,  
F. H. SANDERS.