

# UNITED STATES PATENT OFFICE.

MORITZ LEINER, OF NEW YORK, N. Y.

## POLISHING-BRUSH.

SPECIFICATION forming part of Letters Patent No. 616,677, dated December 27, 1898.

Application filed April 20, 1898. Serial No. 678,248. (No model.)

*To all whom it may concern:*

Be it known that I, MORITZ LEINER, a citizen of the United States, residing at New York, in the borough of Bronx, State of New York, have invented certain new and useful Improvements in Polishing-Brushes, of which the following is a specification.

This invention relates to brushes; and the object of the invention is to provide a simple and durable brush which is in the end less costly than those at present in use.

This invention consist of a suitable cylindrical body provided at one or both ends with an annular flange offset therefrom, substantially C-shaped brush-sections composed of twisted-wire cores having radiating bristles, one end of each of said cores being bent or engaged over said flange, and means for holding said ends in position, as will be hereinafter described and then particularly claimed.

In the accompanying drawings, Figure 1 is a perspective view of one form of brush embodying my invention. Fig. 2 is a diametrical section of the same, showing one of the brush-sections about to be applied thereto. Fig. 3 is a view, on a reduced scale, looking at the brush from the opposite side of Fig. 1. Figs. 4 and 5 are small detail views of several modifications; and Fig. 6 is another modification, showing a flange and retaining-ring at each end of the brush-body.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, Figs. 1 to 3, inclusive, A indicates the disk-shaped body of a buffing-brush, which is preferably composed of wood or similar material, said disk being encircled by a circumferential band B, of sheet metal, said band being offset or extending beyond the body of the disk at one or both ends, so as to form an annular side flange b. Into the central hole of the disk-shaped body A is inserted a suitable spindle C. The body A and the band B may be of different shapes and sizes, according to the form of brush which is desired to be produced.

The bristle portion of the brush, which is applied to the circumferential rim B or the periphery or outside of the body A, is composed of brush-sections D, which are arranged upon the disk or body A so as to extend parallel with each other and transversely across

the circumference of said body. Each brush-section D is composed of a center core d, of twisted wires, between which are held the bristles d', so that a cylindrical brush-section is produced. In order to apply the brush-section D to the body A, the side or face of the same opposite to the flange b is preferably provided with a series of perforations a, concentric with the axis of the disk or body, said perforations being of a number corresponding with the brush-sections to be applied. As evident modifications to meet the requirements and different forms of brushes the perforations may be displaced by recesses or annular grooves or the brush-sections may be suitably held in any preferred manner at that side or end of the disk or body.

To attach the brush-sections to the body or disk, one end of each core of the brush-sections, as shown plainly in Fig. 2, is inserted in one of the perforations or sockets a. The wire core is then bent at an angle to the inserted end, so as to extend a short distance radially on the disk, the body of the brush-section being then bent and returned in practically the same direction as the inserted end, so as to extend parallel with and transversely across the periphery or outside of the body A, the opposite end of the wire core being then reverted or bent inwardly, so as to form a hook d<sup>2</sup>, which is engaged over the offset flange b at the opposite side of said body a. The cores of the brush-sections D are composed of some pliable metal which is not liable to break in bending, and when the said sections are arranged in position the bristles in contact with the supporting-surface will be flattened out, while those not in contact with the same will extend in a curve or semicircle from one side of the brush-section to the other, so that when a number of brush-sections are arranged alongside of each other a nearly cylindrical brush for buffing and polishing purposes is obtained. The brush-sections being thus applied one after the other and being pressed so as to form a compact bristle surface, the said brush-sections are ready to be firmly fastened in position. This is done by inserting within the space formed within the offset-flange b a retaining device or ring E, which is somewhat smaller than the flange b, so that an annular groove or re-

**No. 616,678.**

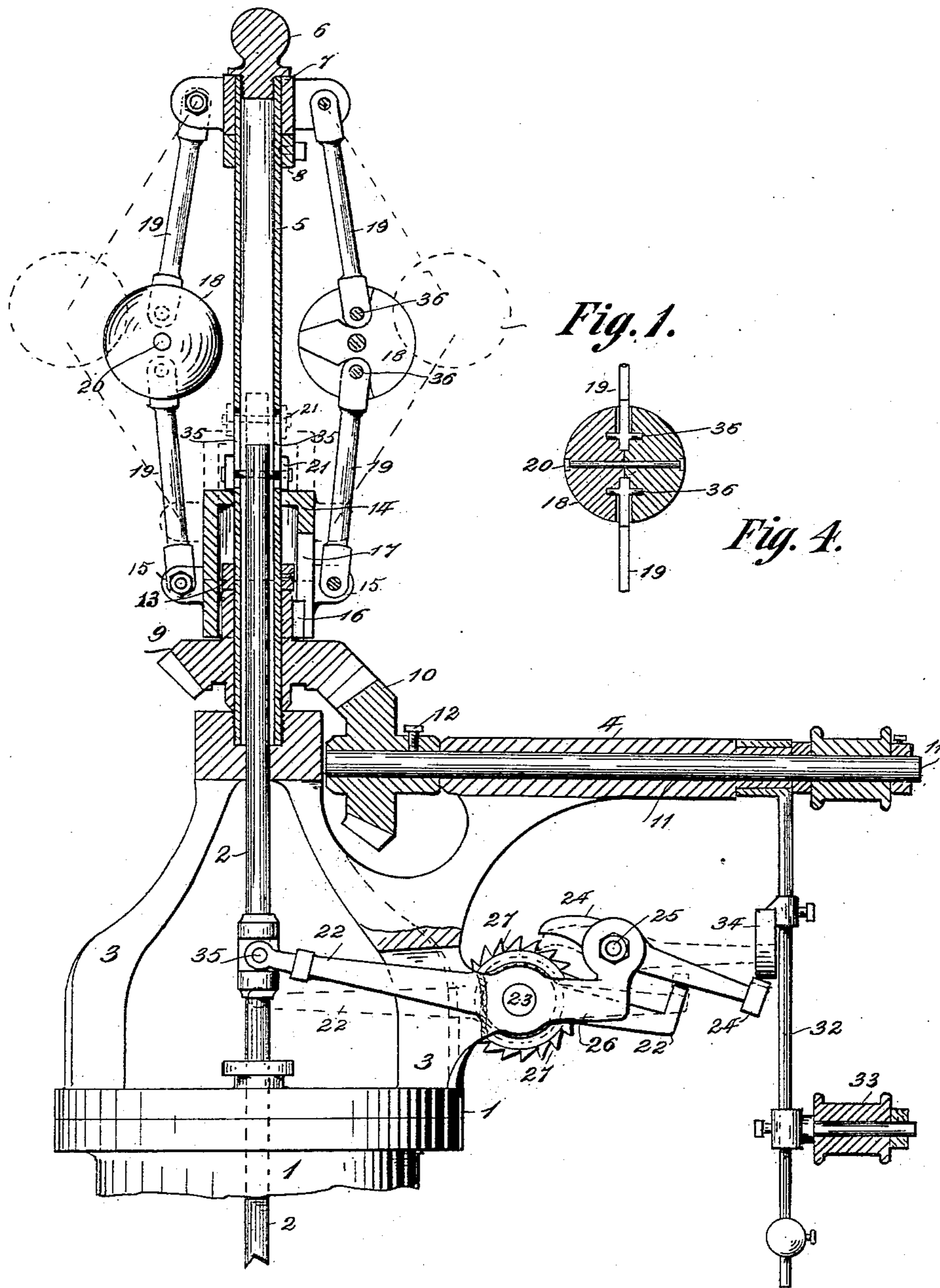
**Patented Dec. 27, 1898.**

**G. J. LOEPER & P. B. HAUSDÖRFER.**  
**AUTOMATIC HIGH SPEED GOVERNOR.**

(No Model.)

(Application filed Feb. 12, 1898.)

**2 Sheets—Sheet 1.**



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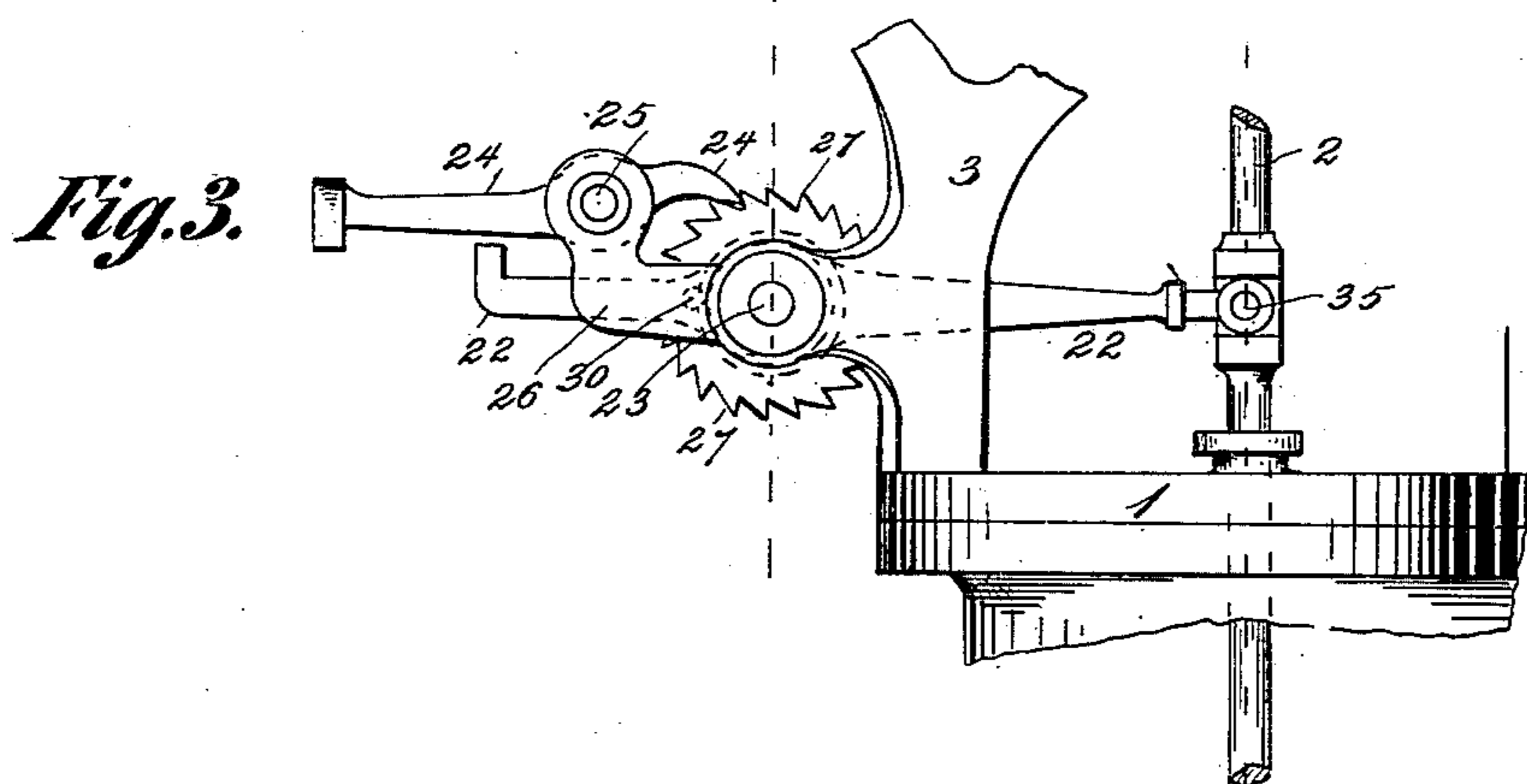
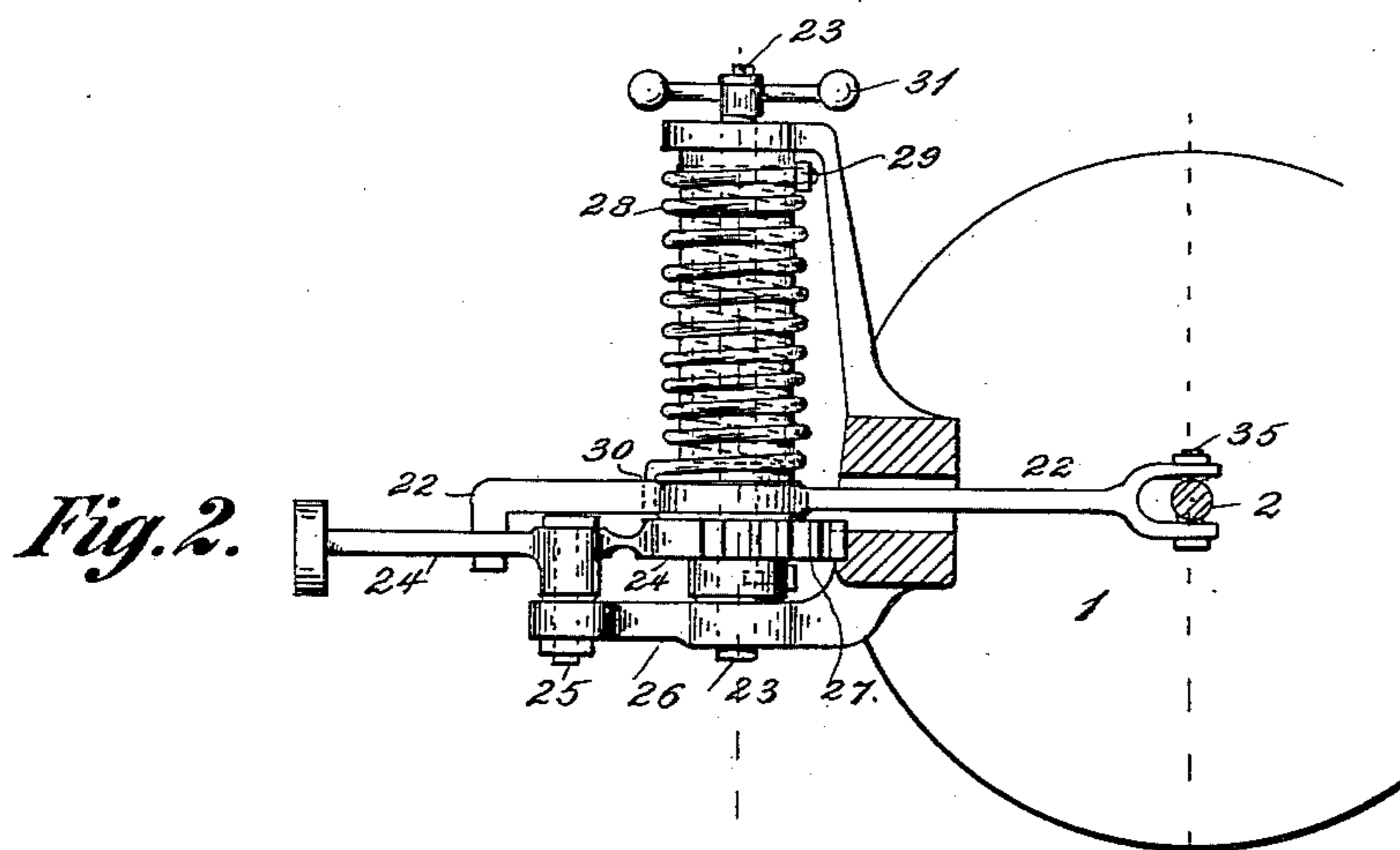
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2 Sheets—Sheet 2.



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