

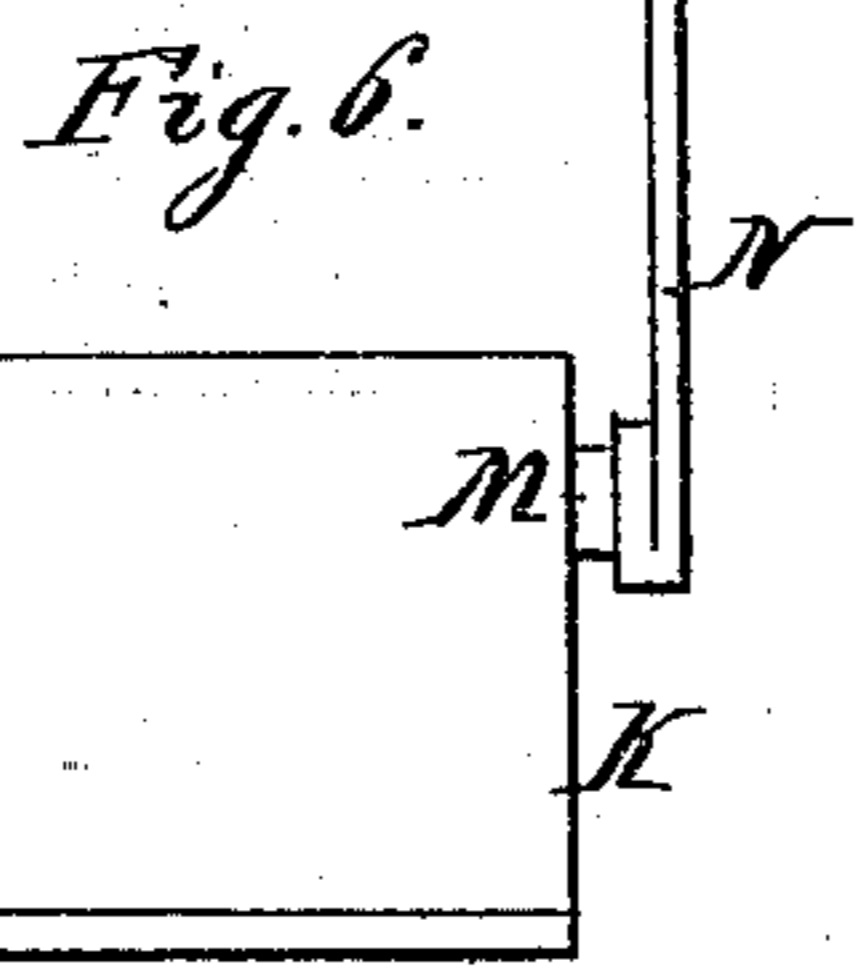
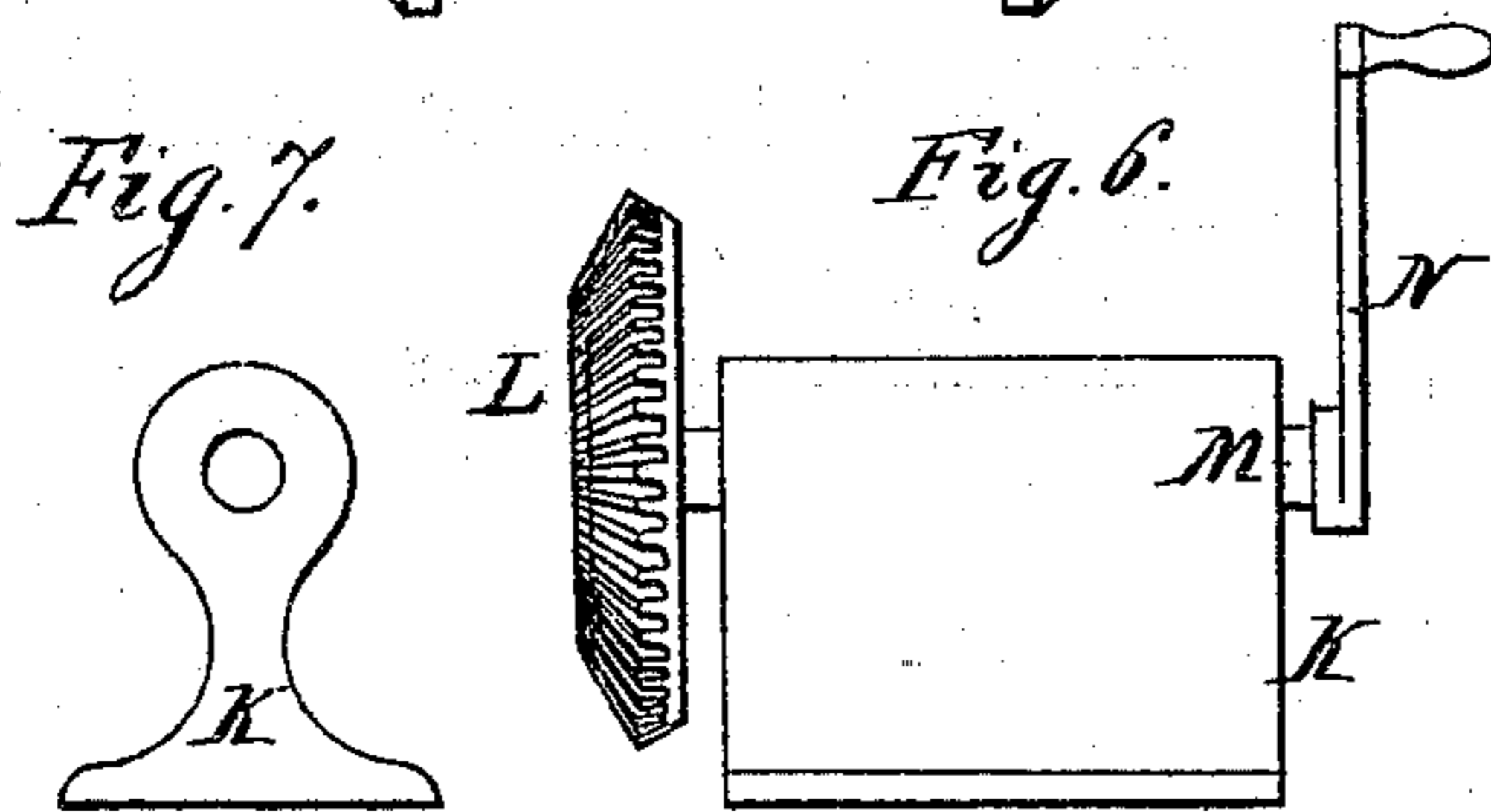
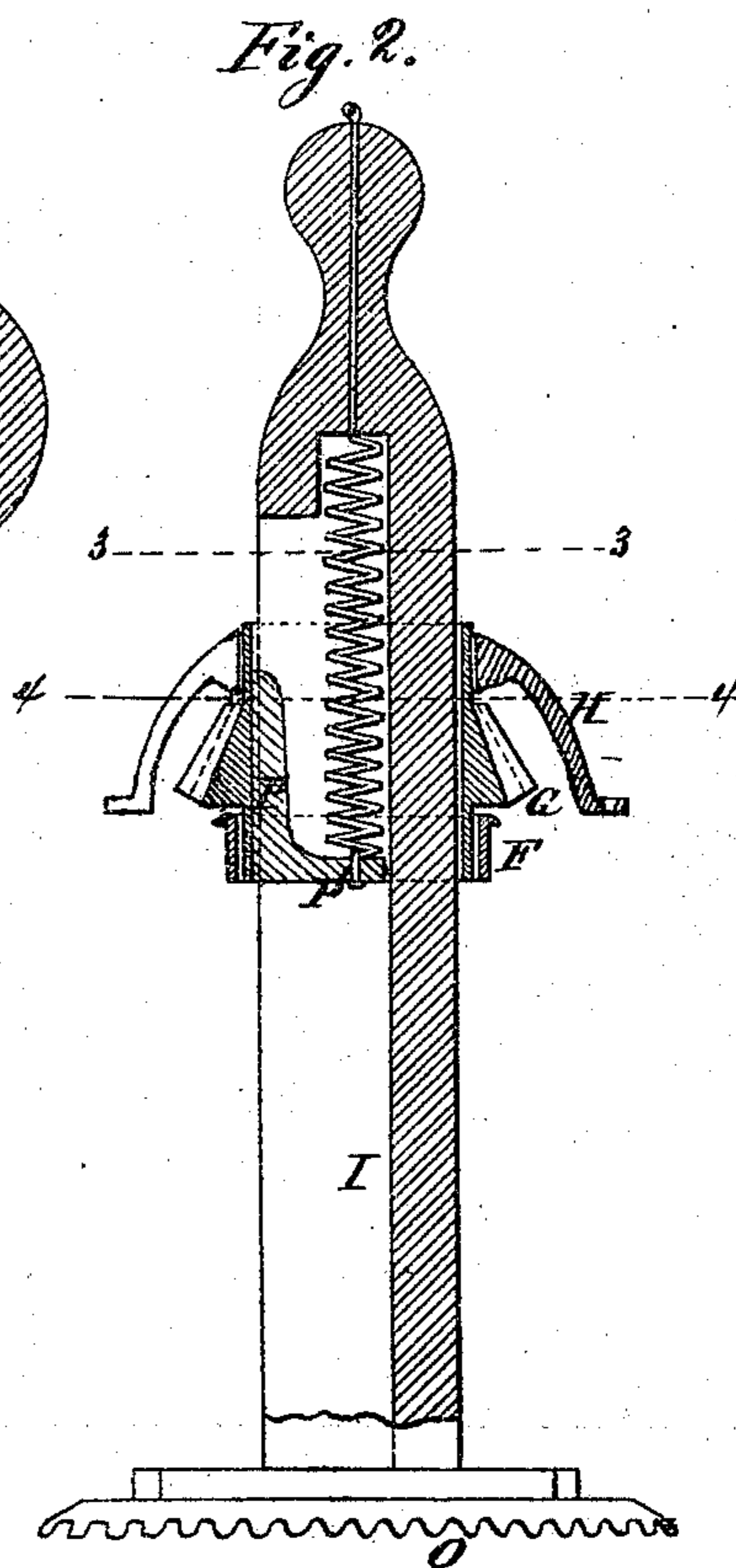
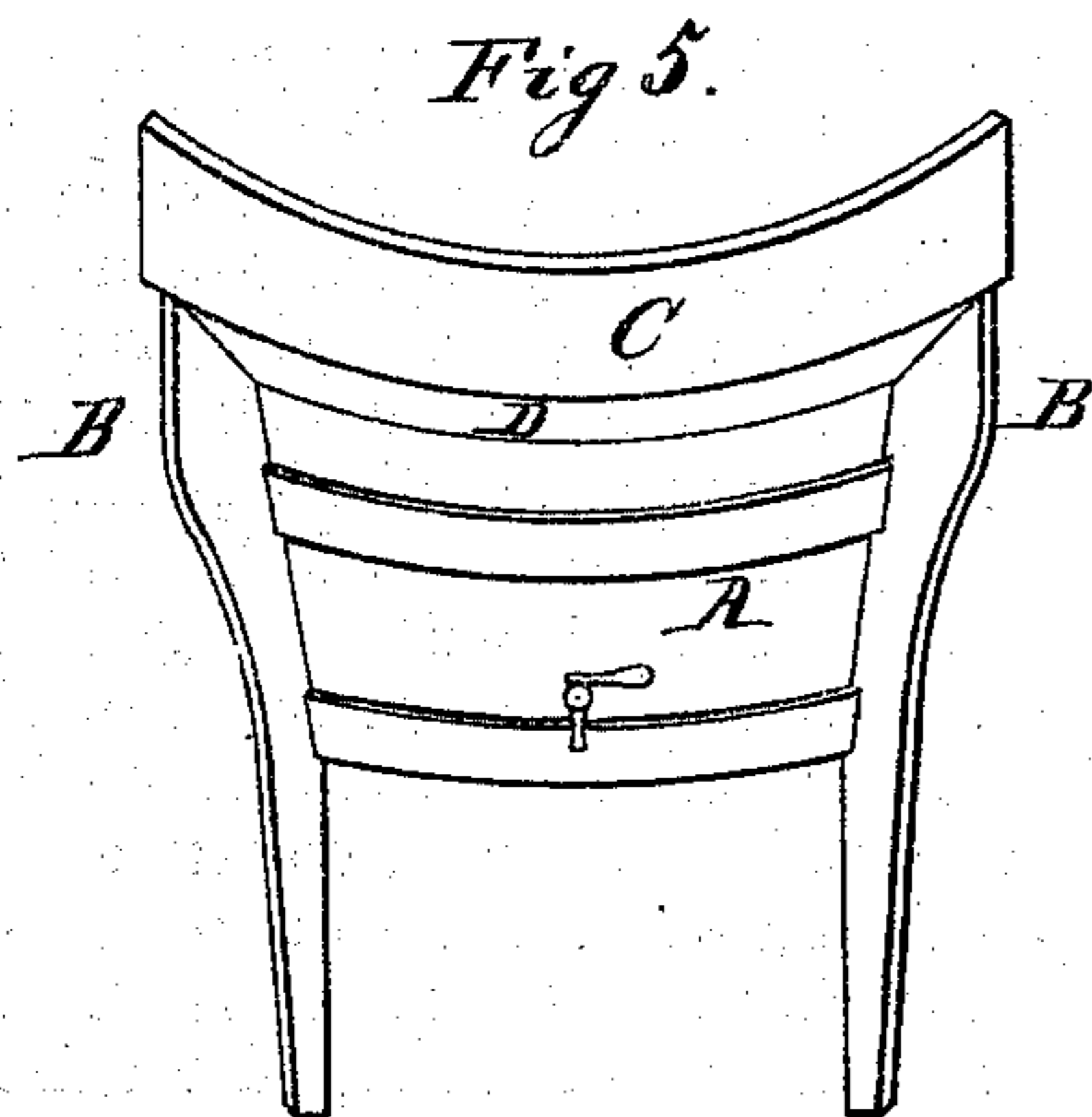
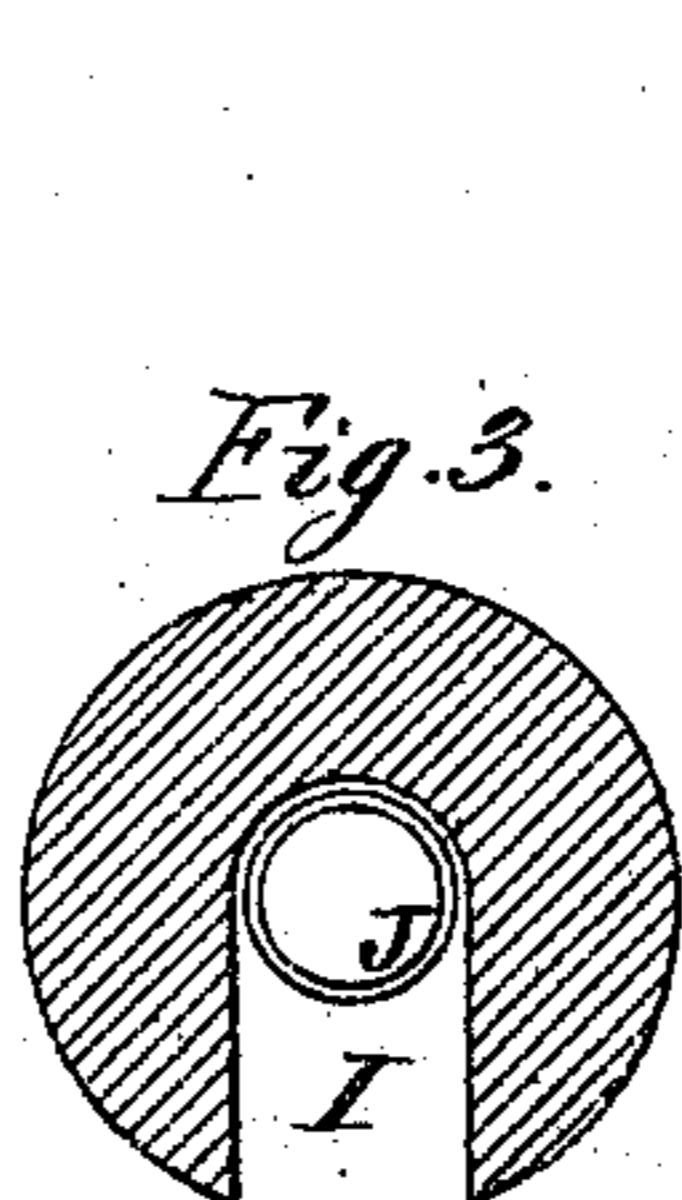
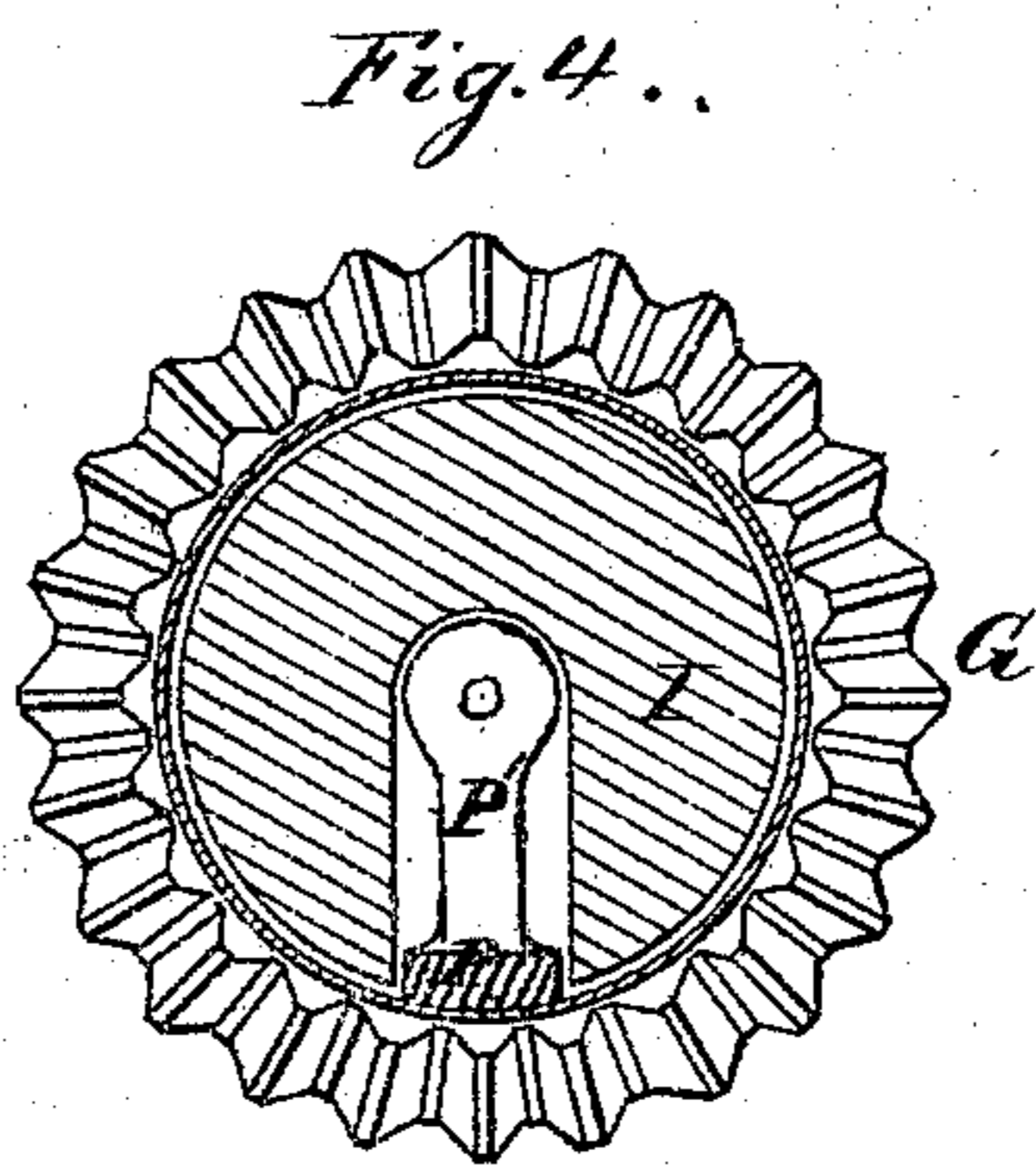
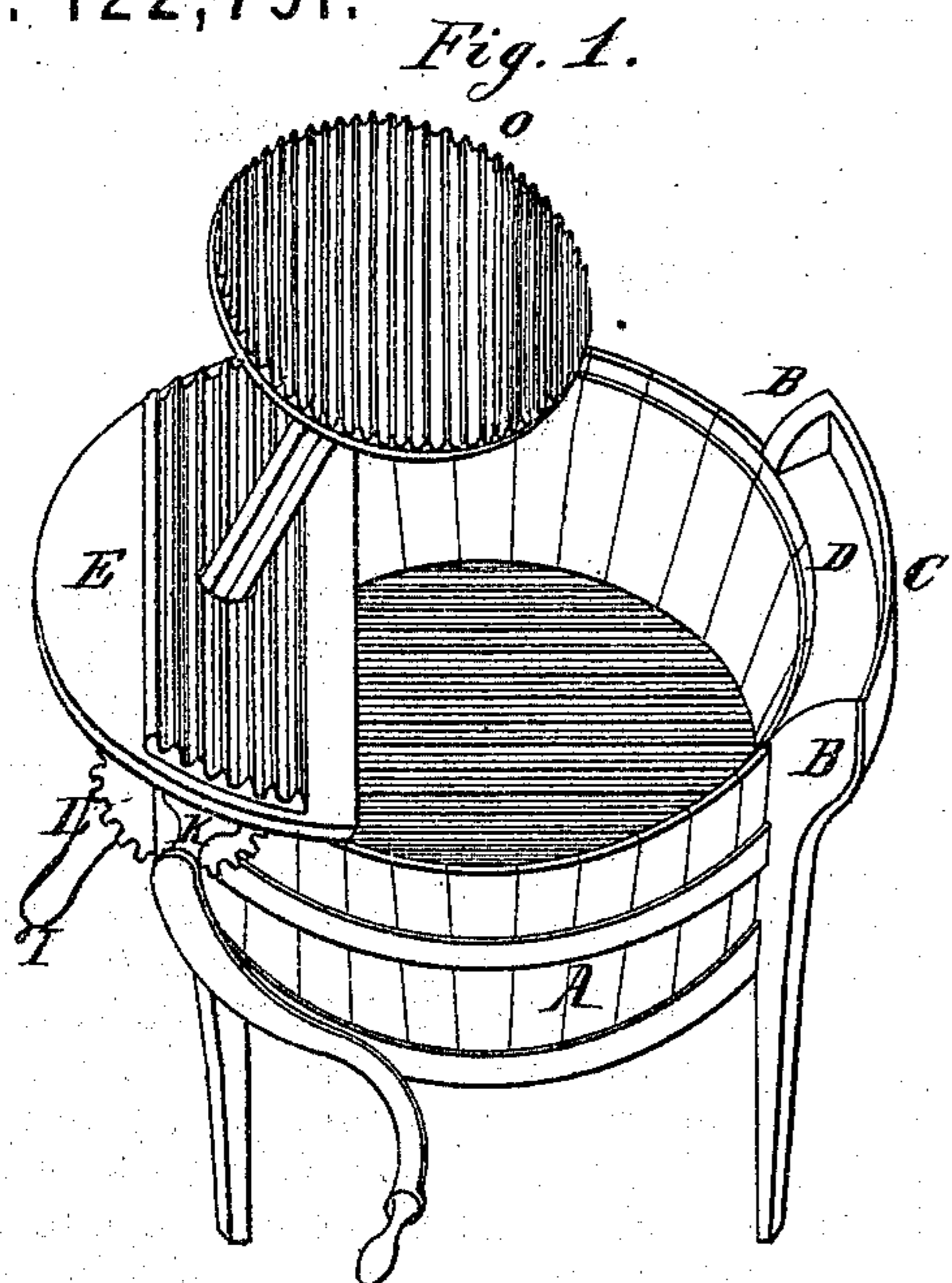
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S. AINSWORTH.

Improvement in Washing Machines.

No. 122,751.

Patented Jan. 16, 1872.



Witnesses.

Samuel W. Richards.
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Inventor.

Squire Ainsworth

UNITED STATES PATENT OFFICE.

SQUIRE AINSWORTH, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 122,751, dated January 16, 1872.

Specification describing certain improvements in Washing-Machines, invented by SQUIRE AINSWORTH, of Pittsburg, in the county of Allegheny, Pennsylvania.

My invention relates to improvements in the construction of upright washing-machines, with rotary or oscillating rubbers. The invention consists primarily in a peculiar hollow gear-wheel for conveying motion to the yielding vertical rubber.

Figure 1 is a perspective of the machine as opened to receive clothes. Fig. 2 is a longitudinal section of the rubber stem and its attachments. Fig. 3 is a transverse section of the same on the line 3 3, Fig. 2. Fig. 4 is a transverse section, on a larger scale, at 4 4, Fig. 2. Fig. 5 is a partial front view, showing the front legs, wringer-board, and conductor. Figs. 6 and 7 are elevations of the driving-gear and its bracket or journal.

A represents an upright tub, of suitable structure and material, and B B the front legs, fastened to the tub. C is the wringer-board, fastened permanently at each end to the legs of the machine for the purpose of holding a wringer. D is the conductor, fastened to the tub, dovetailed into the legs, and fastened to the wringer-board. E represents the hinged cover of the tub. F is a collar inserted in the cover, forming the lower journal. G is a hollow gear, with a flange above and below, and a tongue, P, running lengthwise, and an arm, P', projecting to the center. There is a small hole in the said arm to fasten the end of the wire spring in. Said gear, flanges, arm, and tongue, are all cast in one and the same piece.

The gear may be made with double arm and tongue, if desired. The lower flange of gear G rests in the collar F. The upper flange is held in the ring of the cap H, which is fastened to the cover in such a way as to allow the easy working of the gear without vibration. I is the rubber stem. This is so constructed as to slide freely through the gear G, having a cavity nearly its entire length to receive the spring J, a perforation from said cavity to the top for securing the same, and a handle by which to lift the rubber O, when necessary. The stem I also has a slot cut in one side to within five inches (more or less) from the top, (or it may be in both sides,) to let the arm P of the gear G pass into the center of the stem. The tongue of the gear G resting in the slot of the stem I prevents the two from turning separately, the slot allowing the stem to slide up and down, according to the amount of clothes in the tub. K, Figs. 6 and 7, represents the wooden journal-block, which is attached by screws or bolts to the top of the lid, and serves to support the crank-shaft M N, and to hold its gear L in mesh with the gear G. When the lever is used this journal is omitted.

What I claim in this, my invention, is—

1. The hollow gear G, constructed and arranged as shown, for the purposes set forth.
2. The gear G, stem I, rubber O, and spring J, all combined and arranged for the purposes set forth.

SQUIRE AINSWORTH. [L. S.]

Witnesses:

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