

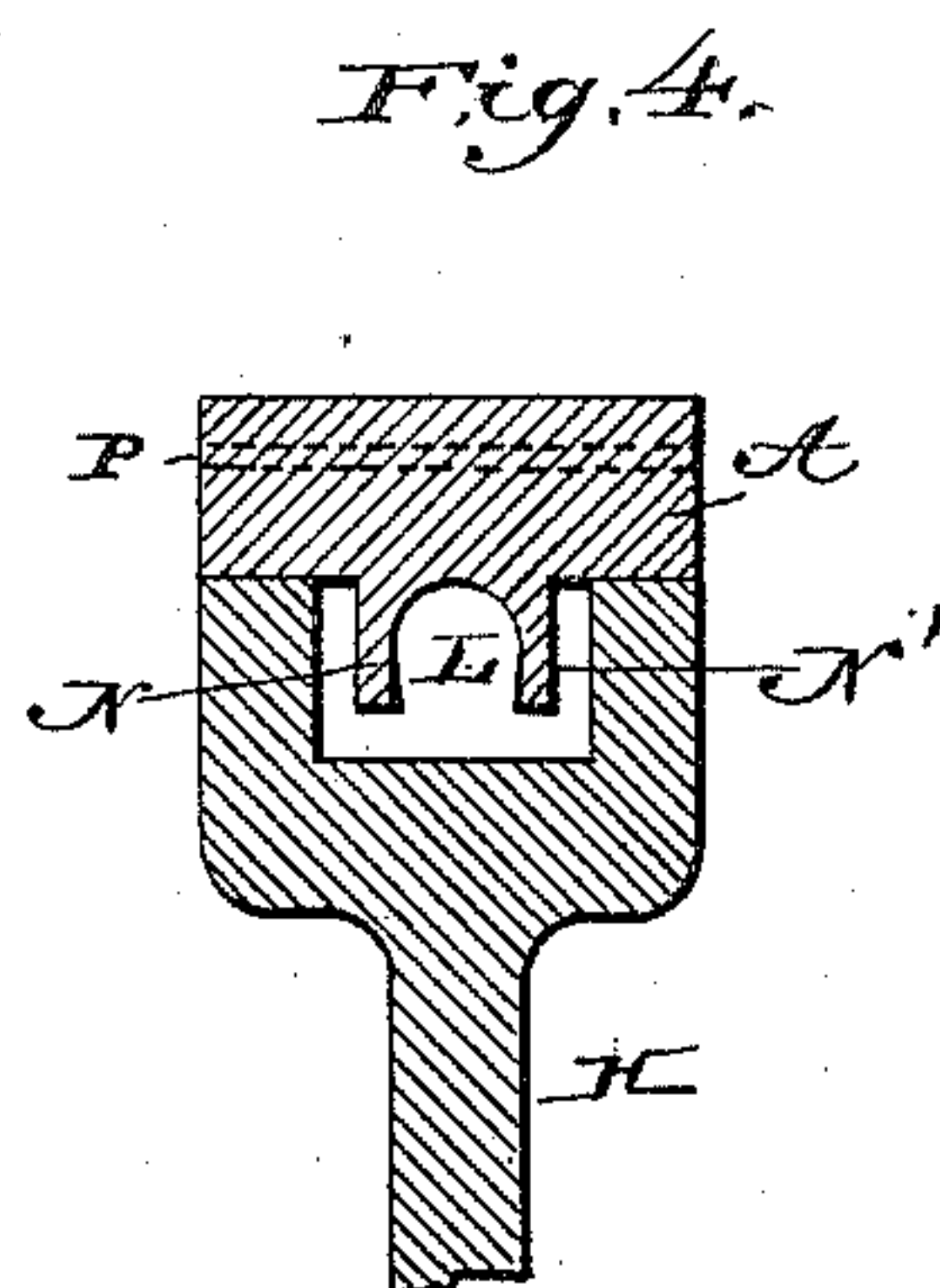
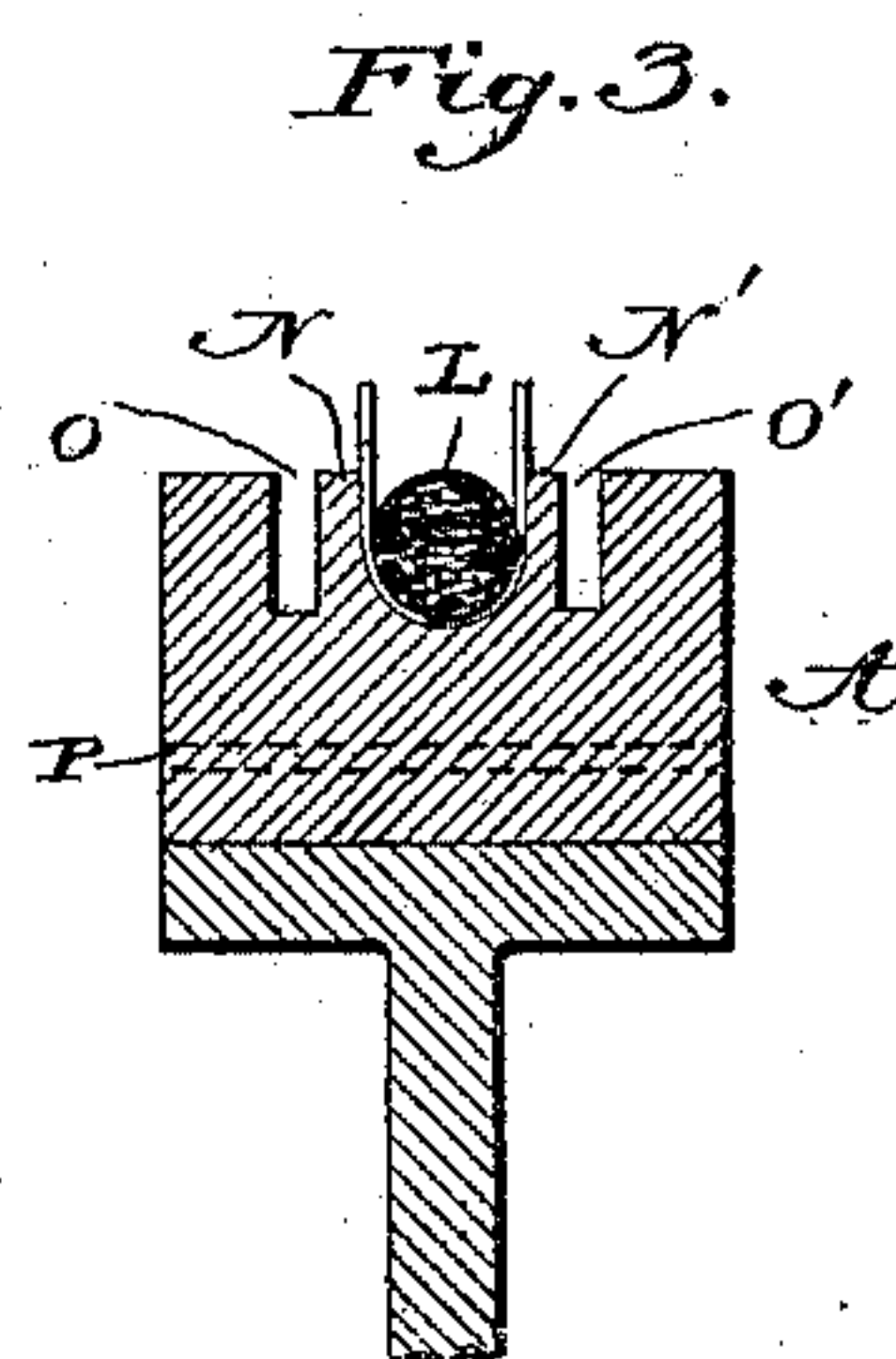
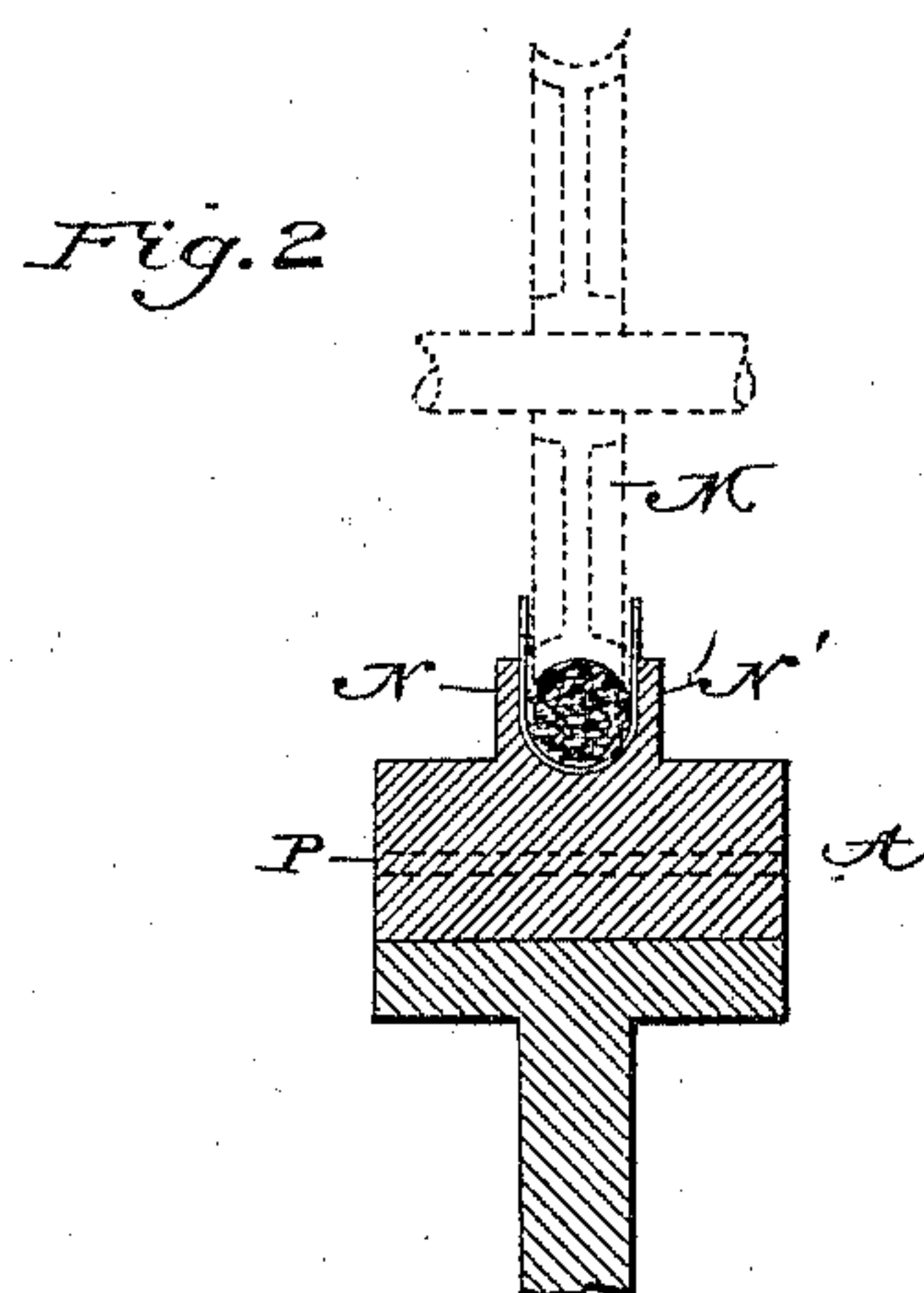
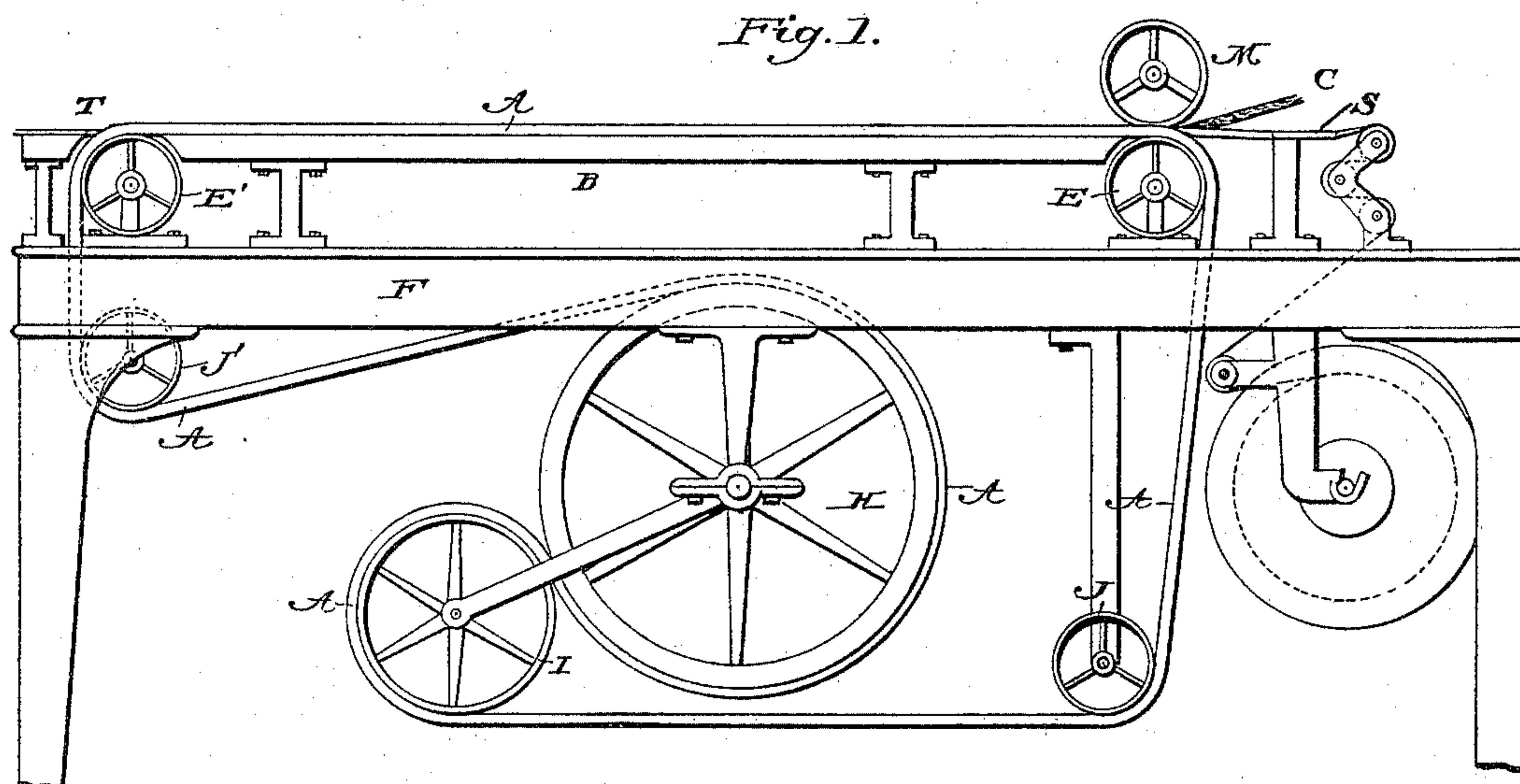
(No Model.)

O. W. ALLISON.

CIGARETTE DRAWING BAND FOR CIGARETTE MACHINES.

No. 456,976.

Patented Aug. 4, 1891.



Witnesses

W. H. Mortimer
H. R. Kennedy

Inventor
Oscar W. Allison

By his Attorneys

Geo. B. Selden

UNITED STATES PATENT OFFICE.

OSCAR W. ALLISON, OF ROCHESTER, NEW YORK.

CIGARETTE DRAWING-BAND FOR CIGARETTE-MACHINES.

SPECIFICATION forming part of Letters Patent No. 456,976, dated August 4, 1891.

Application filed June 19, 1889. Serial No. 314,853. (No model.)

To all whom it may concern:

Be it known that I, OSCAR W. ALLISON, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented an Improved Cigarette Drawing-Band for Cigarette-Machines, of which the following is a specification, reference being had to the accompanying drawings.

My present invention relates to an improved cigarette drawing-band for cigarette-machines, which improvements are fully described and illustrated in the following specification and accompanying drawings, the novel features thereof being specified in the claim annexed to the said specification.

In the accompanying drawings, representing my present improvements, Figure 1 is a side elevation. Fig. 2 is a transverse section of the band. Figs. 3 and 4 are transverse sections of the band representing modifications.

In the accompanying drawings, A represents the endless flexible drawing-band, which in practical operation travels continuously at a suitable speed over the carrying-pulleys E E' and along the table or other suitable support B.

F represents a suitable bed-plate, from which the operative parts of the machine are supported in any suitable manner. The band is driven by the driving-wheel H, a tension-pulley I being employed to keep the band under strain.

J J' are corner-pulleys, around which the band runs. The band is provided on its outer side with a continuous longitudinal groove L of dimensions adapted to the size of the cigarettes it is designed to make, which groove is formed between two thin continuous longitudinal ribs N N', which are made of such a thickness that they will spring or bend outward slightly when the cigarette-rod is forced into the groove by the wheel or roller M. The band is preferably made of vulcanized india-rubber, being strengthened by a layer of fabric P, but it may be formed of any other suitable flexible material. For rubber bands employed on cigarettes of ordinary dimensions the ribs N N' should be about one-sixteenth of an inch in thickness. When the band runs around the driving-pulley H, so that it bears on the side of the band containing the groove, the band is provided with longitudinal slots O O', Fig. 3, the outer por-

tions of the band being flush with the edges of the ribs N N', so as to afford suitable bearing-surface between the band and the pulley. The pulley, however, may be provided with a circumferential recess which receives the ribs N N', as indicated in Fig. 4.

The improved grooved band herein described is designed to be used in connection with any suitable tobacco-filler forming mechanism or paper pasting and folding devices. The tobacco-filler or rod C is delivered to the band, as represented in the accompanying drawings, and the paper is received from a suitable supply-roll passing under the former S.

M is a wheel or roller which presses the tobacco and paper into the groove between the flexible ribs N N'. The cigarette is disengaged from the groove in the band by the scraper T, which is supported in any suitable way, so that the cigarette is delivered from the groove by coming in contact therewith.

A presser bar or foot may be used instead of the roller M. As the rib or ribs on the side of the band are made of thin continuous flexible material, they will yield outwardly slightly when the cigarette-filler is pressed in between them, and as their elasticity causes a gentle and uniform pressure continuously along the sides of the cigarette the latter is drawn along by the band without wrinkles in or injury to the wrapper in which the filler is inclosed. Want of continuity in either of the ribs results in injury to the wrapper and prevents the production of smooth uniform cigarettes.

What I claim is—

The combination, in a cigarette-machine, of the endless flexible cigarette drawing-band A, consisting of a relatively heavy body having two continuous projecting ribs on its outer surface forming a groove with a semi-cylindrical bottom between them, one or both of said ribs being made thin and capable of yielding laterally when the cigarette is introduced between them and of a height greater than the semi-diameter of the cigarette, and a suitable device, as M, for pressing the cigarette-filler into the said distensible groove, substantially as described.

OSCAR W. ALLISON.

Witnesses:

GEO. B. SELDEN,
W. R. KENNEDY.