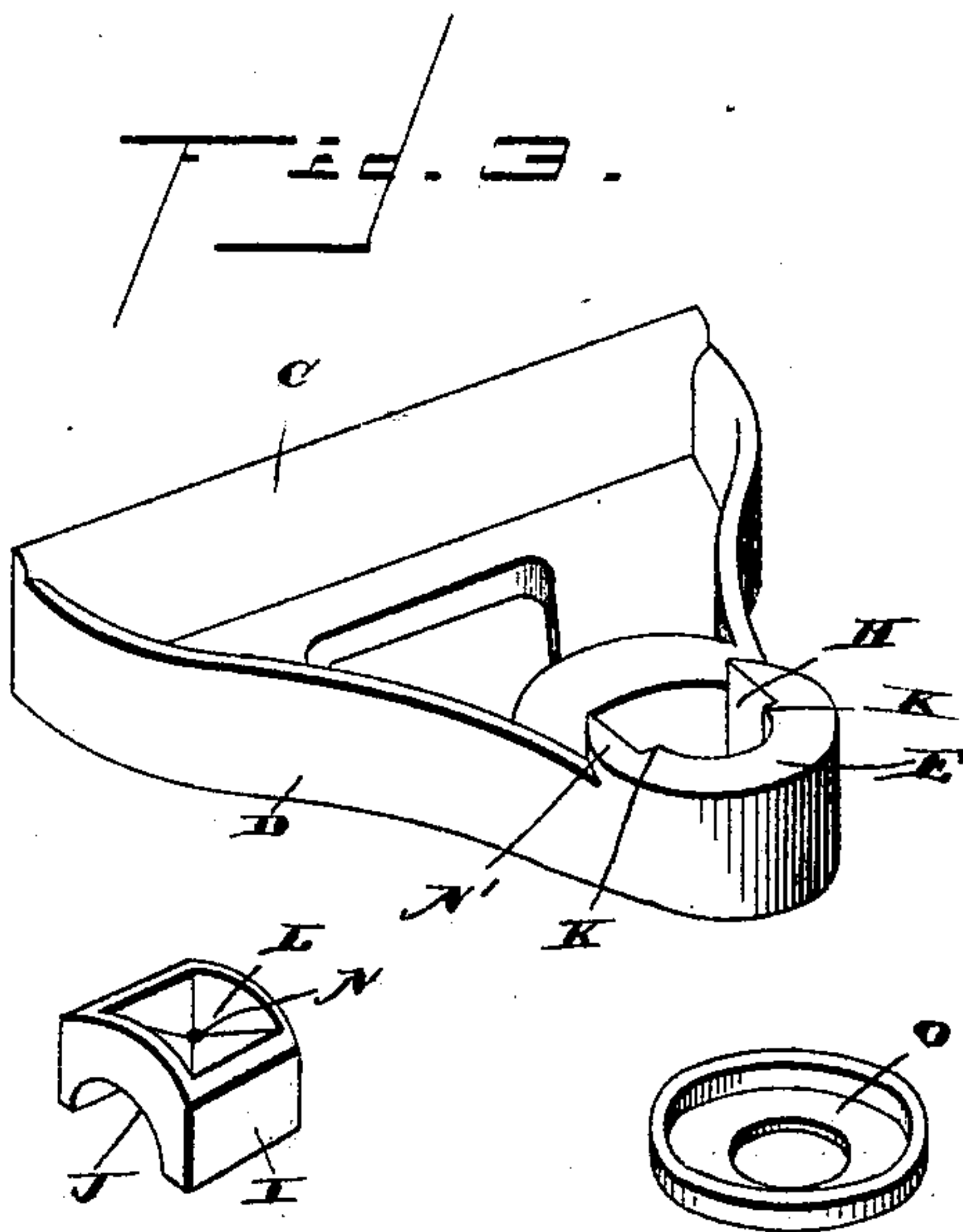
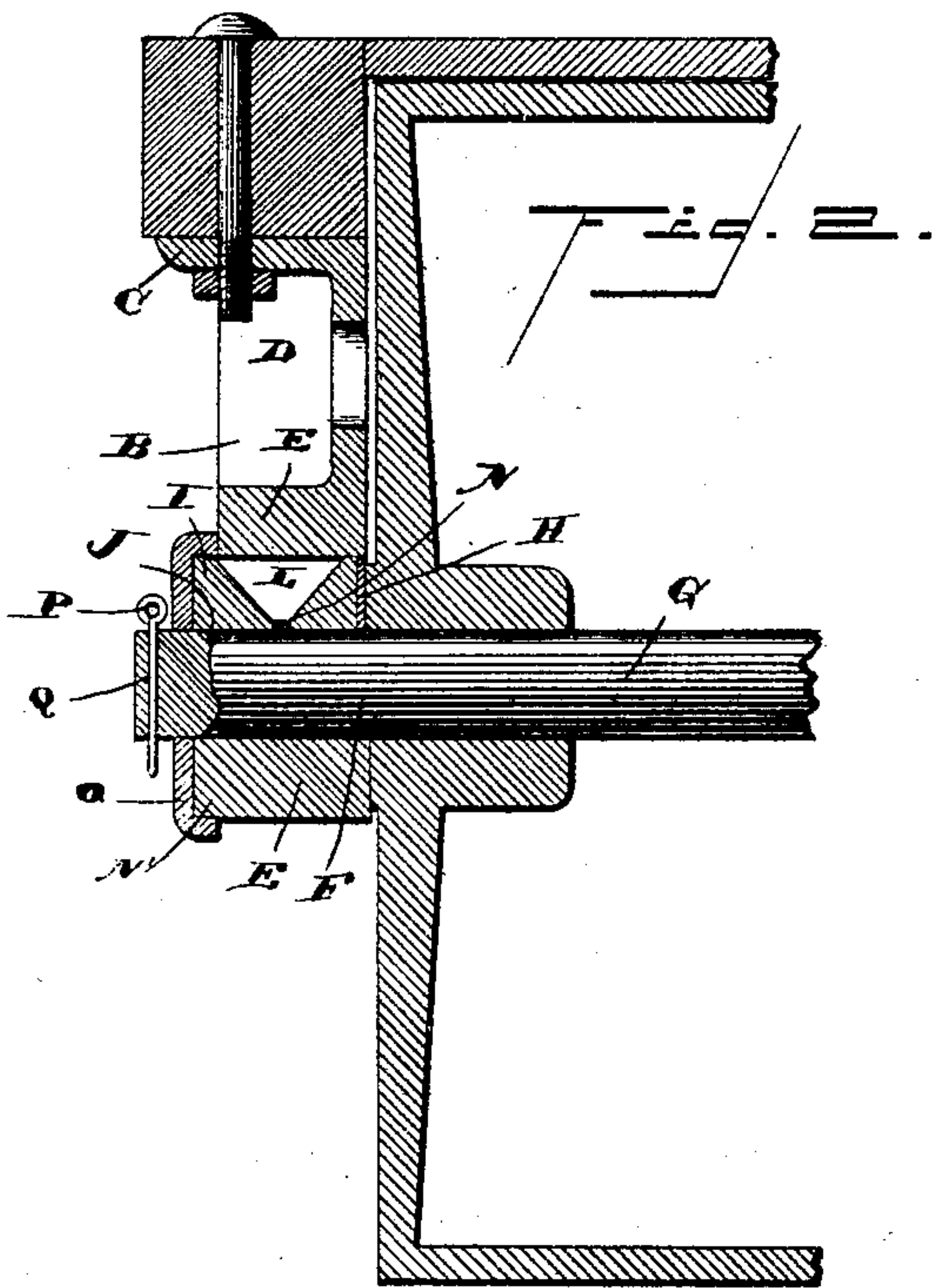
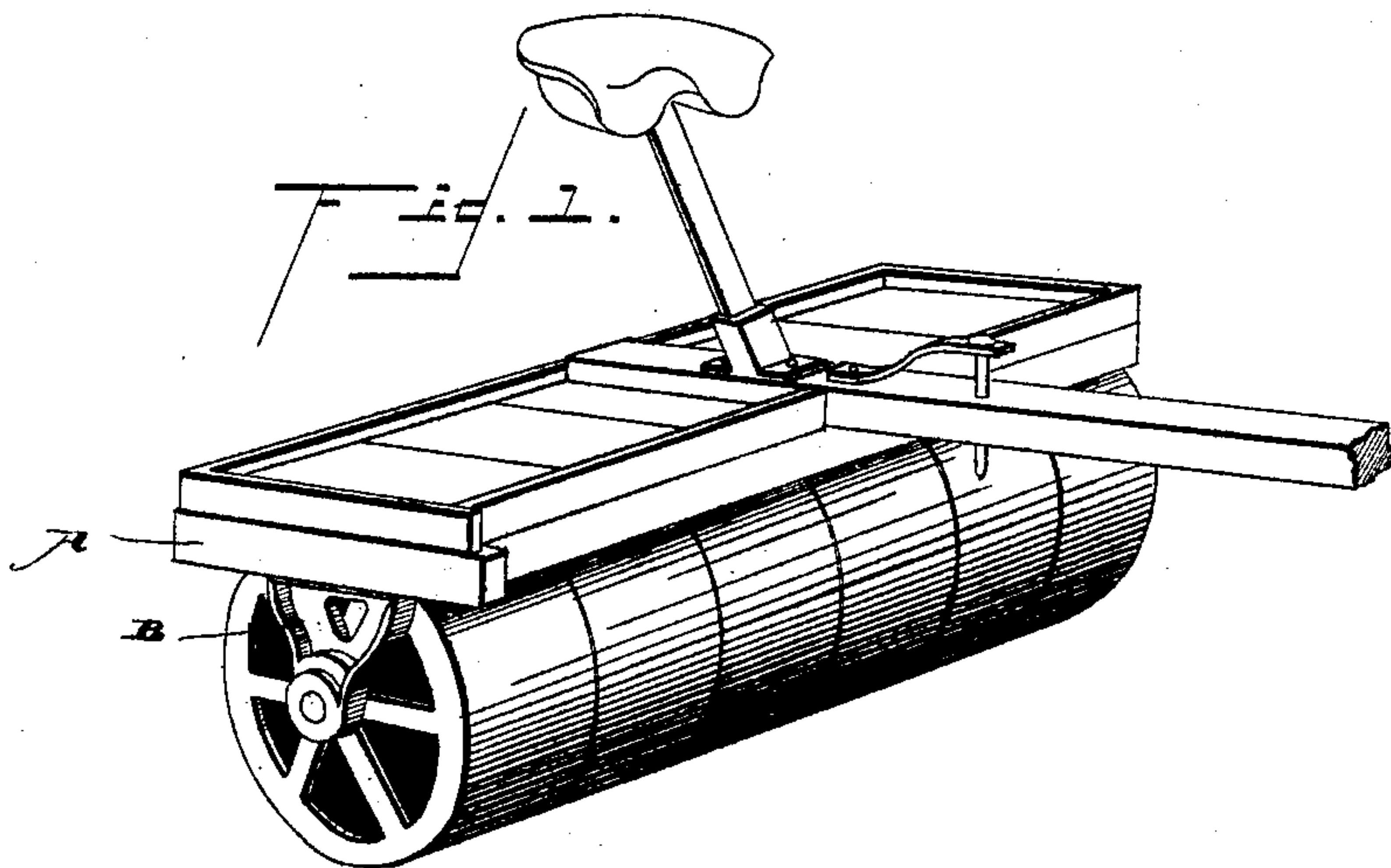


(No Model.)

J. G. MALLERY.
LAND ROLLER.

No. 435,441.

Patented Sept. 2, 1890.



Witnesses

Samuel Red.

Wm. Bagger.

Inventor

James G. Mallery

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES GILLET MALLERY, OF FLINT, MICHIGAN.

LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 435,441, dated September 2, 1890.

Application filed July 24, 1889. Serial No. 318,593. (No model.)

To all whom it may concern:

Be it known that I, JAMES GILLET MALLERY, a citizen of the United States, residing at Flint, in the county of Genesee and State of Michigan, have invented a new and useful Land-Roller, of which the following is a specification.

This invention relates to land-rollers; and it has for its object to provide an improved frame for the same equipped with standards having removable self-lubricating bearings, which shall be readily accessible for the purpose of supplying lubricating material whenever it shall be needed.

The invention consists, essentially, in the improved construction of the said standards, which will hereinafter be fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of a land-roller equipped with my improvements. Fig. 2 is a sectional view of the same taken longitudinal through the axis. Fig. 3 is a perspective detail view of one of the standards with the cap and detachable bearing removed.

The same letters refer to the same parts in all the figures.

A designates the frame of my improved land-roller, which is provided at its ends with the depending standards or bearings B B, which may be constructed in any suitable manner of cast-iron, or any other material which may be deemed suitable for the purpose. The said standards consist, preferably, of the top pieces C, having downwardly-extending converging arm D D, at the junction of which the journal-boxes E are formed, said boxes being open at their inner ends for the admission of the spindles F F of the axle G of the roller. The latter may be constructed of cast-iron or other suitable material, and may be in either one or more sections.

In the upper sides of the journal-boxes are formed recesses H for the admission of the detachable bearing-blocks I, the under sides of which are provided with semi-cylindrical concavities J, forming bearings for the upper half of the spindles of the axle. The said bearing-blocks rest upon shoulders K, formed in the recesses H, and the upper sides of the said bearing-blocks are provided with recesses or depressions L, forming receptacles for the

lubricating material, and from the bottoms of which perforations N extend through the said bearing-blocks. The outer sides of the bearings in the standards are formed with shoulders, over which are fitted the detachable caps O, which serve to retain the detachable bearing-blocks in position in their respective recesses, and also to prevent the entrance of sand and grit into the bearings.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood.

The construction of my improved standards is simple and inexpensive, and the detachable bearing-blocks may be easily detached when worn and new ones substituted. The said bearing-blocks, it will be seen, take the entire wear of the axle, and being provided with lubricating recesses may be kept constantly supplied with lubricating material, thus causing the roller to work easily and noiselessly. It will be observed that when the spindles of the axle are mounted in the standards they extend through the outer sides of the latter, thus enabling pins or keys P to be inserted through holes Q drilled vertically through said spindles, and serving to retain the caps O in position upon the standards, and at the same time retaining the spindles in their respective bearings. It is obvious, however, that other means may be resorted to for accomplishing the same purpose without departing from the spirit of my invention.

Any suitable lubricating material may be used in connection with my improved bearing. Ordinary axle-grease or tallow will, however, be found quite useful for the purpose, inasmuch as the heat caused by friction will reduce the same to a liquid state with sufficient rapidity to cause the bearings to be sufficiently lubricated without waste of the lubricant.

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

1. The combination, with the standards having bearings provided with recesses in their upper sides, of the detachable bearing-blocks fitted in said recesses, and having lubricating recesses in their upper sides, the annular shoulders formed upon the said bear-

ings, and the caps or covers fitted detachably upon the said shoulders, substantially as and for the purpose set forth.

2. In a land-roller, the herein-described
5 frame, having standards provided with bearings, the upper sides of which are provided with recesses, in combination with the bearing-blocks fitted detachably in said recesses, the roller-axle having spindles extending
10 through said bearings and provided with vertical perforations, the caps or covers fitted detachably upon annular shoulders at the

outer ends of said spindles adjacent to the outer sides of the bearings, and the pins or keys extending through the vertical perfora- 15 tions in the spindles, substantially as and for the purpose herein specified.

- In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES GILLET MALLERY.

Witnesses:

D. D. AITKEN,

DAVID P. HALSEY.