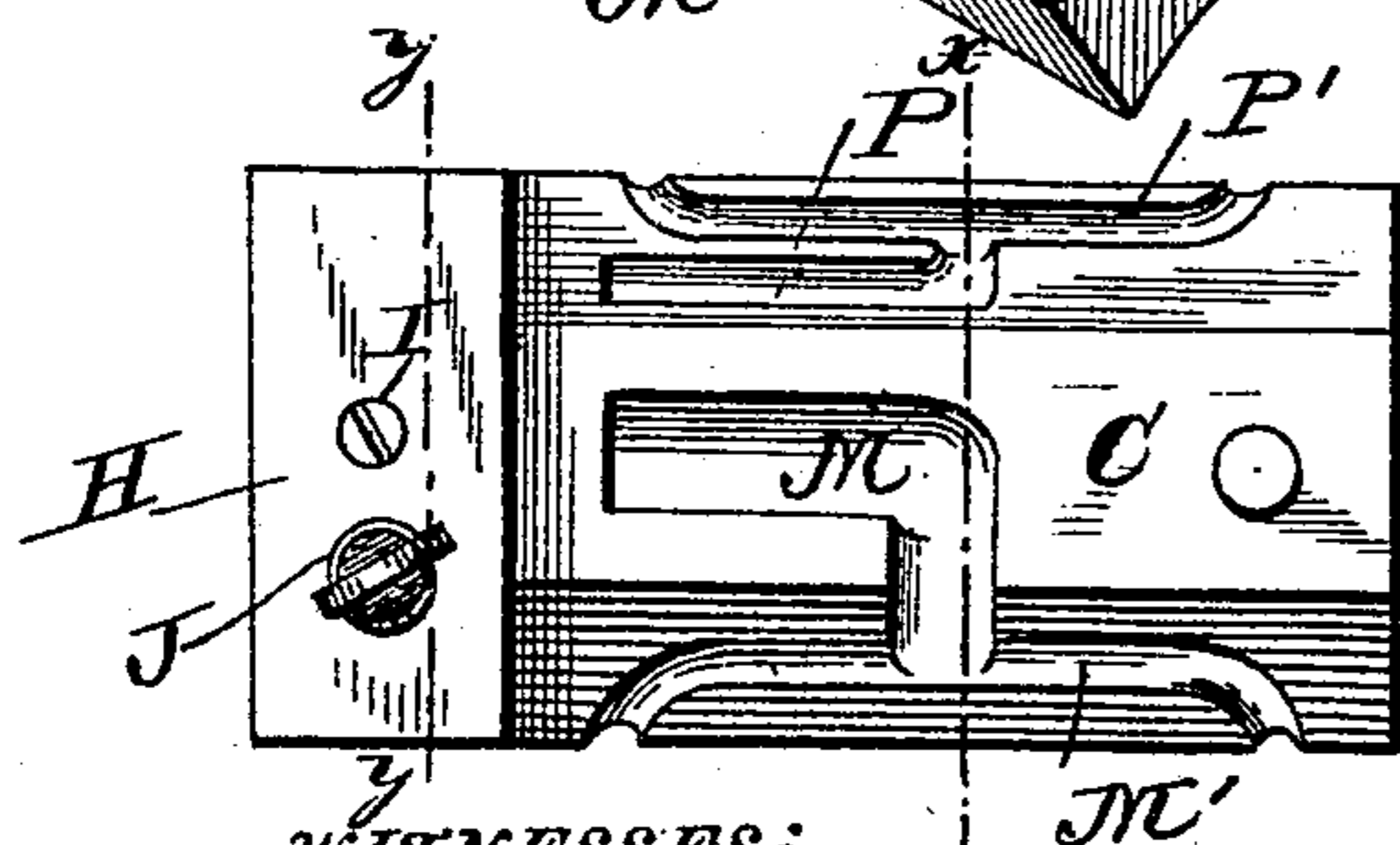
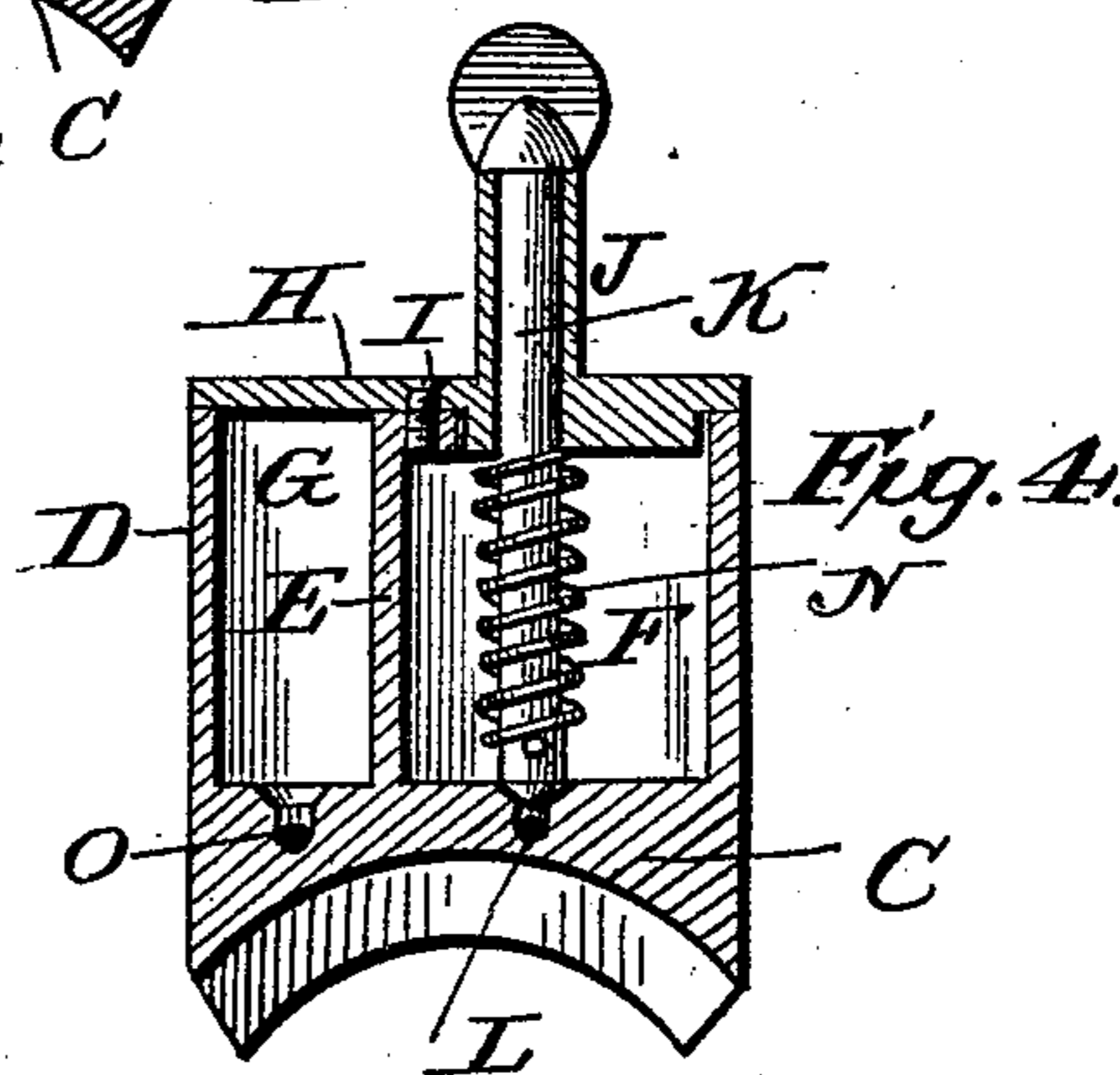
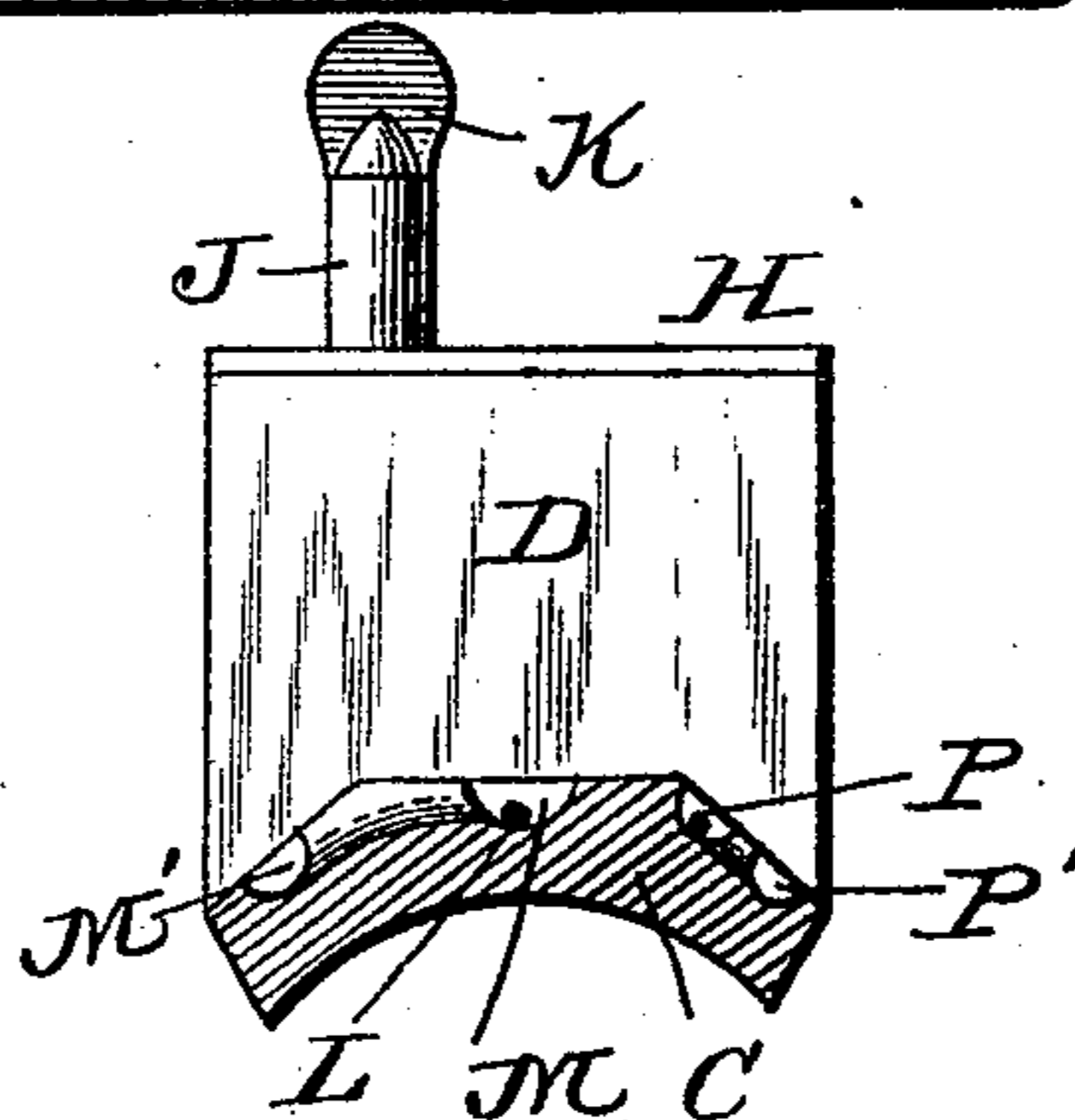
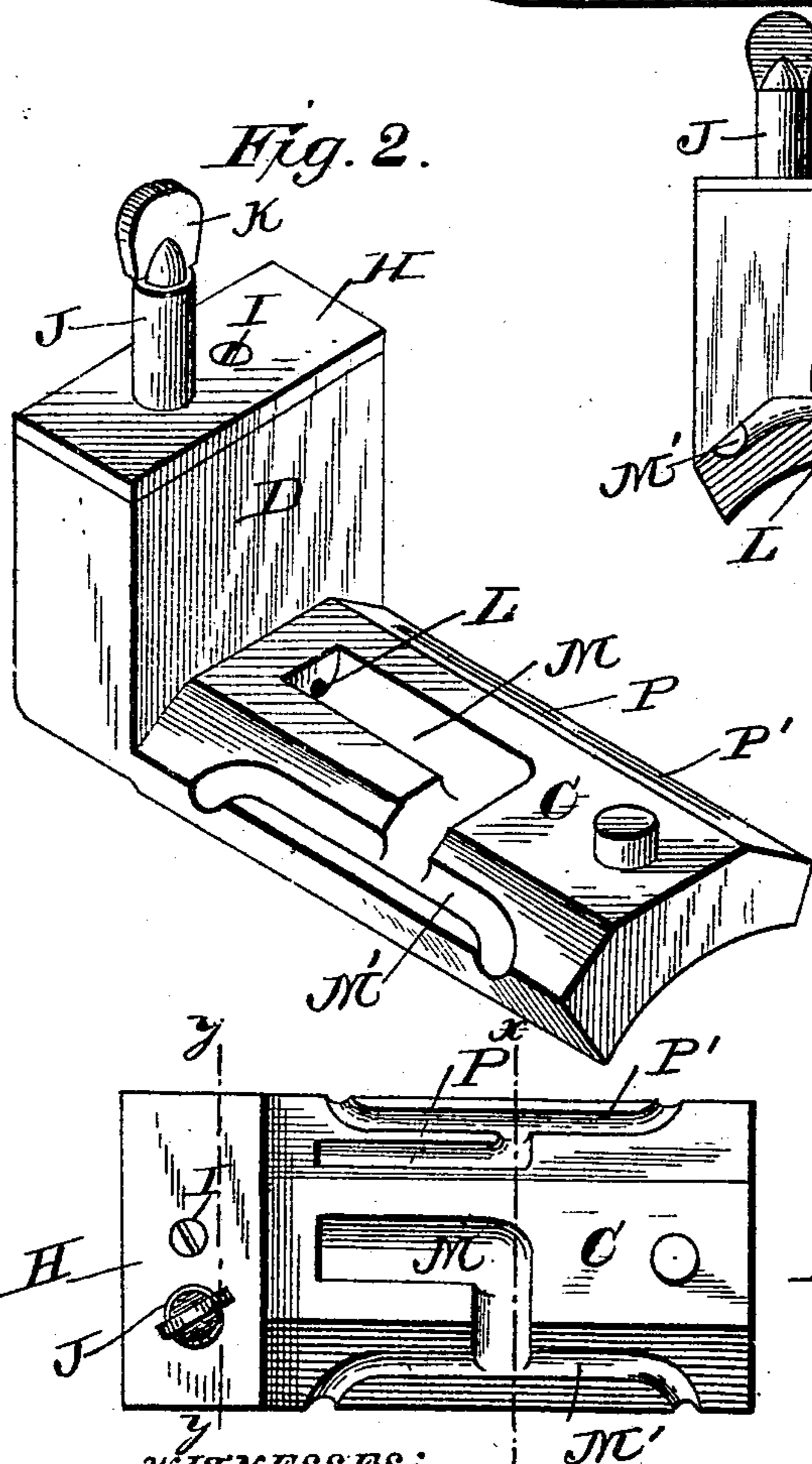
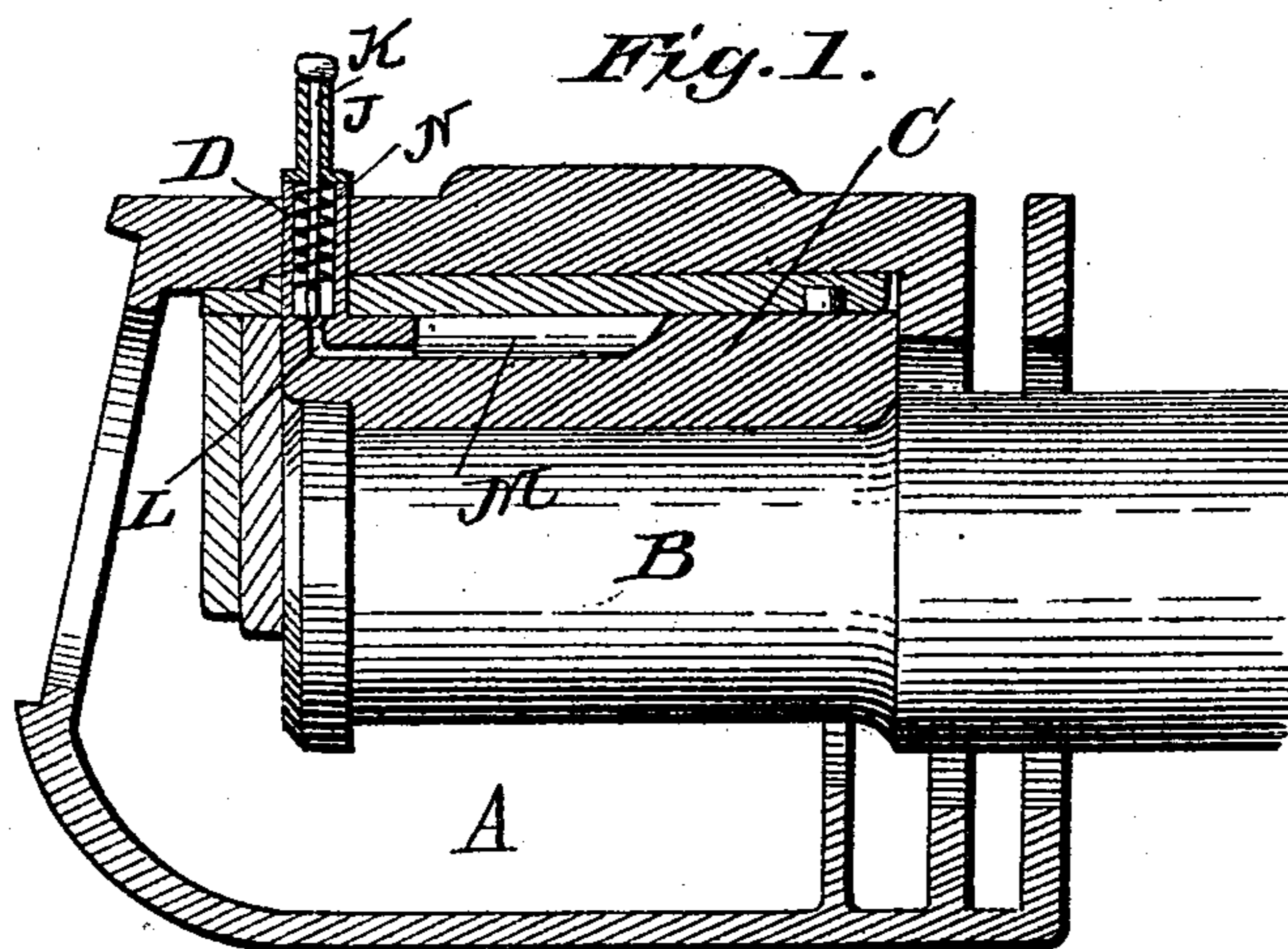


(No Model.)

J. FARLEY.
SELF LUBRICATING JOURNAL.

No. 459,628.

Patented Sept. 15, 1891.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JAMES FARLEY, OF WAUKESHA, WISCONSIN.

SELF-LUBRICATING JOURNAL.

SPECIFICATION forming part of Letters Patent No. 459,628, dated September 15, 1891.

Application filed May 8, 1891. Serial No. 392,072. (No model.)

To all whom it may concern:

Be it known that I, JAMES FARLEY, a citizen of the United States, and a resident of Waukesha, in the county of Waukesha and State of Wisconsin, have invented certain new and useful Improvements in Self-Lubricating Journals; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal sectional view on a vertical plane through a railway-car journal-box provided with my improved lubricating device. Fig. 2 is a perspective view of this device removed from the journal-box. Fig. 3 is a transverse vertical sectional view on line $x x$ in Fig. 5. Fig. 4 is a cross-section through the parallel plane indicated by the broken line marked $y y$ on Fig. 5, and Fig. 5 is a top or plan view of the device.

Like letters of reference denote corresponding parts in all the figures.

This invention relates to self-lubricating journal-boxes for the trucks or drivers of locomotives, railway-cars, or shaft-bearings generally; and it consists in the combination, with the journal-box proper, of the lubricating distributor and fount, which will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, letter A designates a journal-box which may be of any approved construction. In this revolves the shaft or axle B, the upper side of which is covered by the lubricating-distributor, which consists of a segment C, fitting into a corresponding opening in the upper section of the box and bearing with its concave under side against the shaft.

At one end of the distributor C is the double fount, which consists of a box D, divided by a transverse wall or partition E into a large chamber F and an adjacent smaller compartment G, both of which are covered by the removable top H, which is held in place by a bolt I, screwed into the partition E. This cover has a collar J, through which the valve K is inserted, the conical lower end of said valve fitting into the outlet L to the main duct M. This mouth or outlet L is kept closed normally

by the lower end of valve K by means of a coiled spring N, which exerts a constant downward pressure on the valve. To open the outlet when it is desired to feed lubricating material into the duct M, the valve is raised by pulling upon the knob or handle at its upper end. The adjacent smaller compartment G has also in its bottom an outlet O, communicating with a secondary duct P. Both these ducts M and P are provided with two or more channels or branch ducts M' and P', which terminate on opposite sides of the distributor C, so as to feed the lubricant to the upper part of the shaft at the point where this part C is joined to the sides of the upper section of the box and on opposite sides.

The operation of this device is as follows: The larger compartment F is filled with any suitable fluid lubricant, such as oil or compositions of which oil forms the chief ingredient, while the smaller compartment G is filled with tallow, grease, or some similar lubricating material which only becomes fluid when hot. By opening the valve K the fluid lubricant is permitted to escape into the main duct M and branch ducts M' and from the latter flows down into the box. As the main duct M is of sufficient capacity to hold quite a supply of fluid lubricant, which is gradually fed through the branches M' to the journal, there is no necessity for opening the valve except at comparatively long intervals, and, if desired, the valve may even be dispensed with entirely. When the distributor C and fount D become heated by the revolutions of the shaft, the solid lubricating material in the compartment G will melt and escape through the outlet O into the duct P and branch ducts P', from which it is fed to the shaft on the outer side of the top port or distributor C. I thus provide for the constant and effectual lubrication of the shaft with little trouble and without waste of material.

In practice the distributor C, with its ducts, should be covered by a suitable cover or casing to protect it and prevent dust and dirt from getting into and obstructing the ducts or channels for the lubricant.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with a journal-box, of

the herein-described lubricating device, consisting of the segmental distributor C, having the double fountain D and provided with the channels M M' and P P', discharging on opposite sides and communicating at their inner ends with their respective chambers in the fount, substantially as and for the purpose shown and set forth.

2. The combination of the segmental distributor C, having channels M M' and P P', discharging on opposite sides, fount D, containing a large chamber F and smaller com-

partment G, said chambers F and G communicating with their respective main ducts M and P through outlets L and O, and spring-actuated valve K, substantially as and for the purpose herein shown and set forth.

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

JAMES FARLEY.

Witnesses:

JAMES A. SWIFT,
ZENUS V. JOHNSTON.