

(No Model.)

W. A. CAREY.

LUBRICATOR.

No. 385,040.

Patented June 26, 1888.

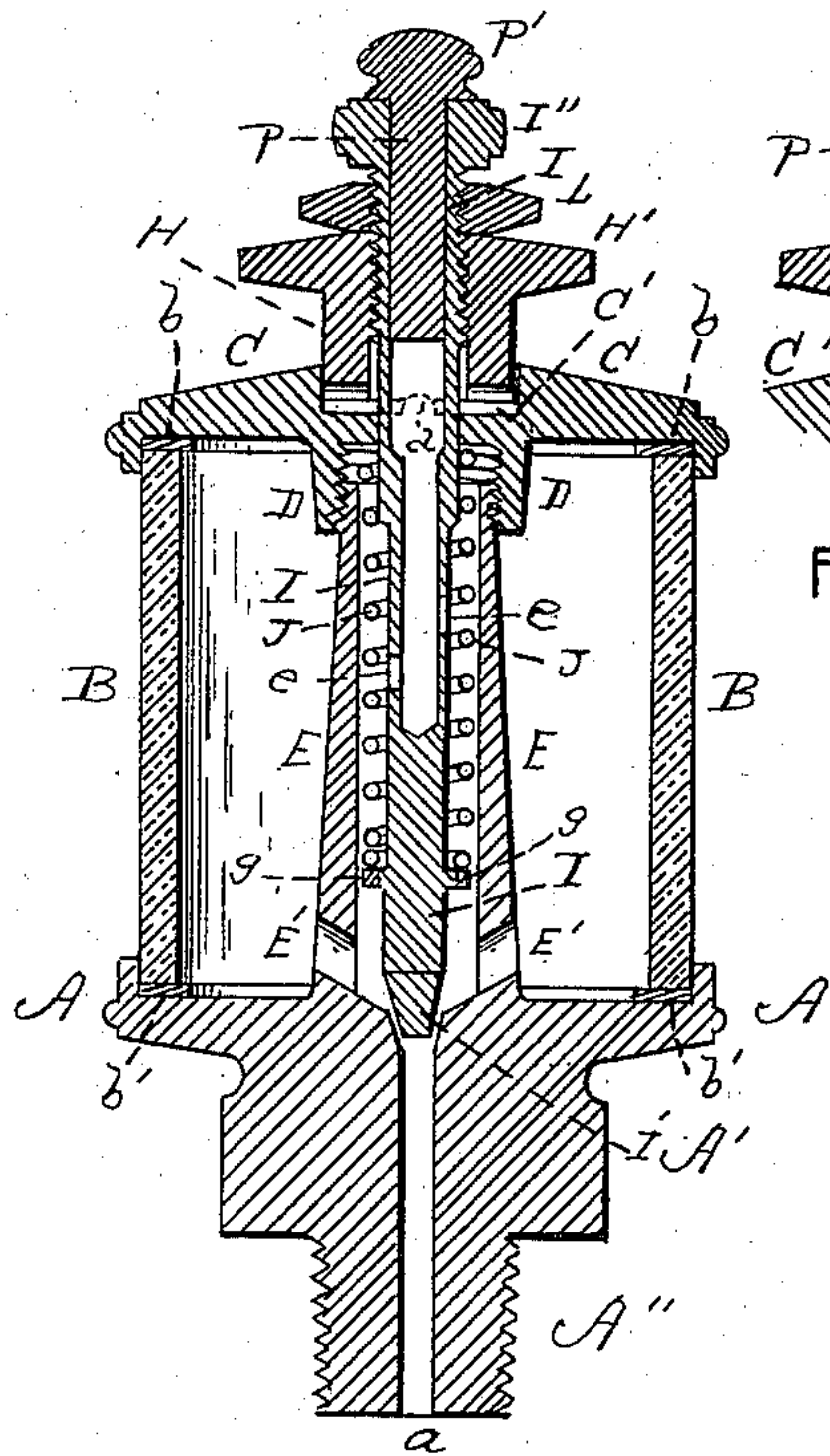


Fig. 1.

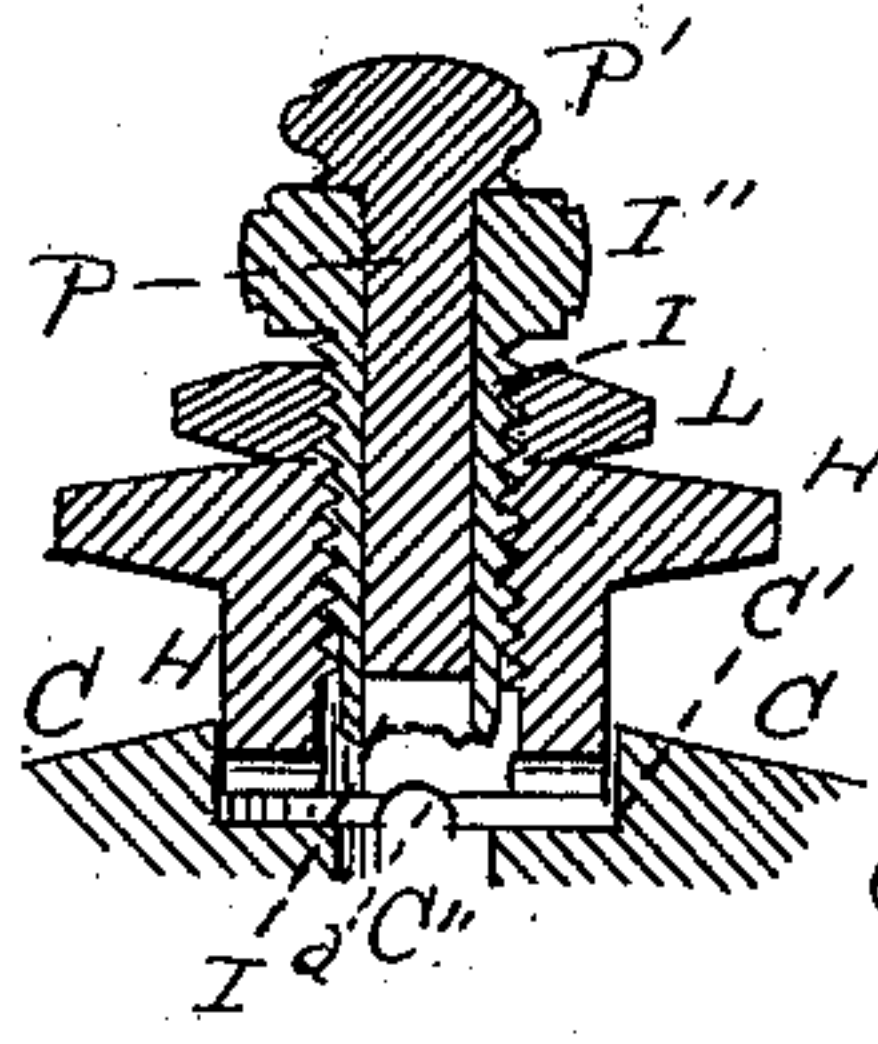


Fig. 2.

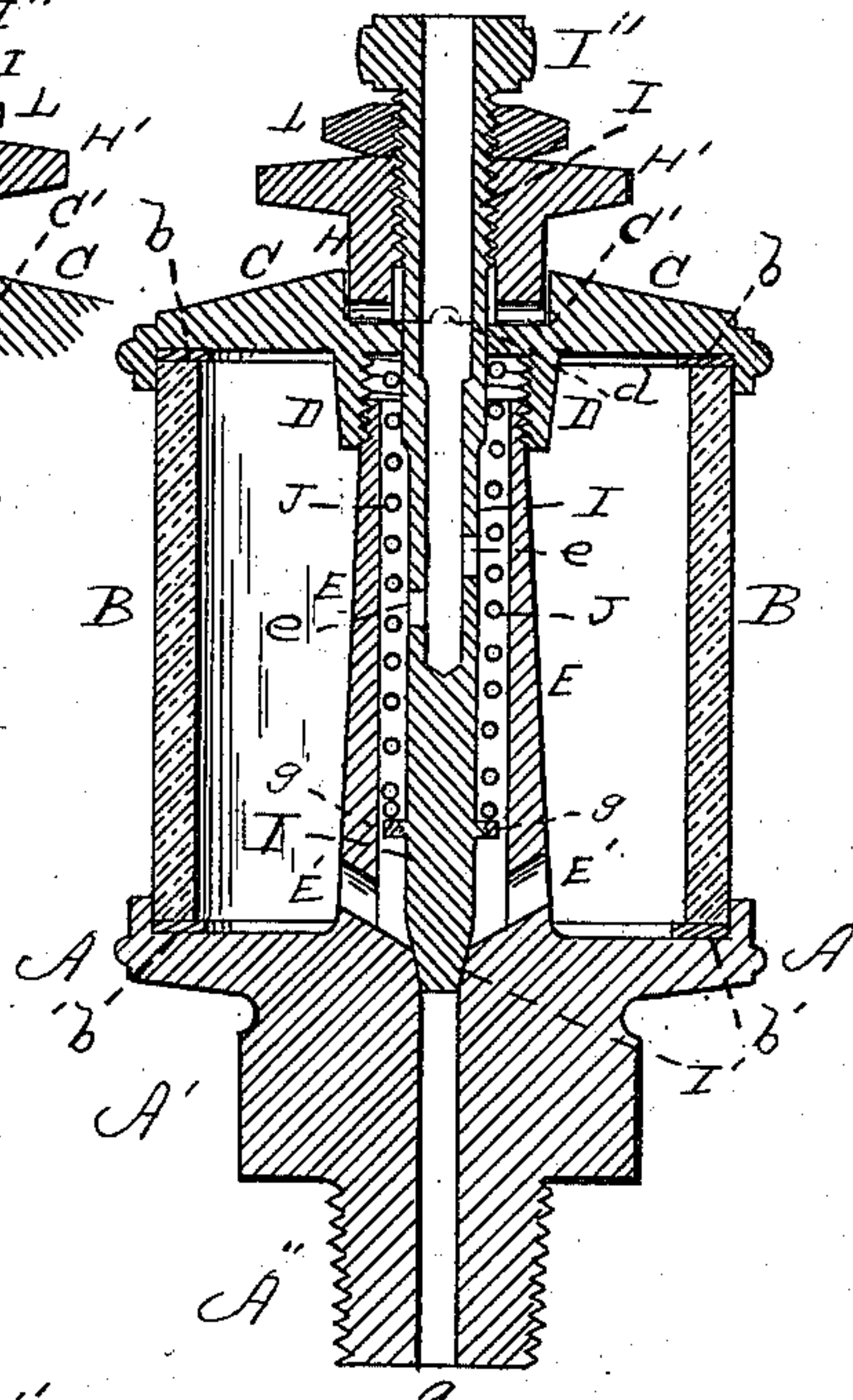


Fig. 3.

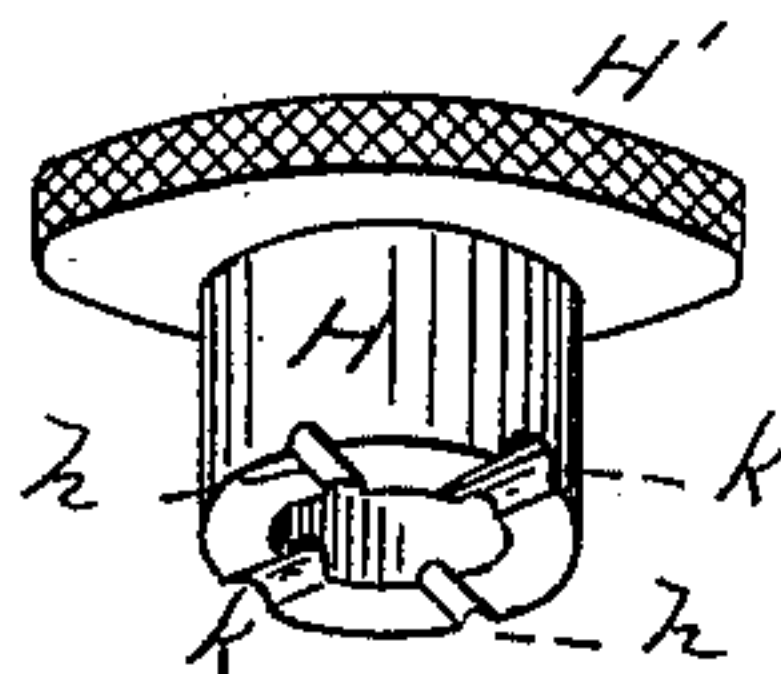


Fig. 4.

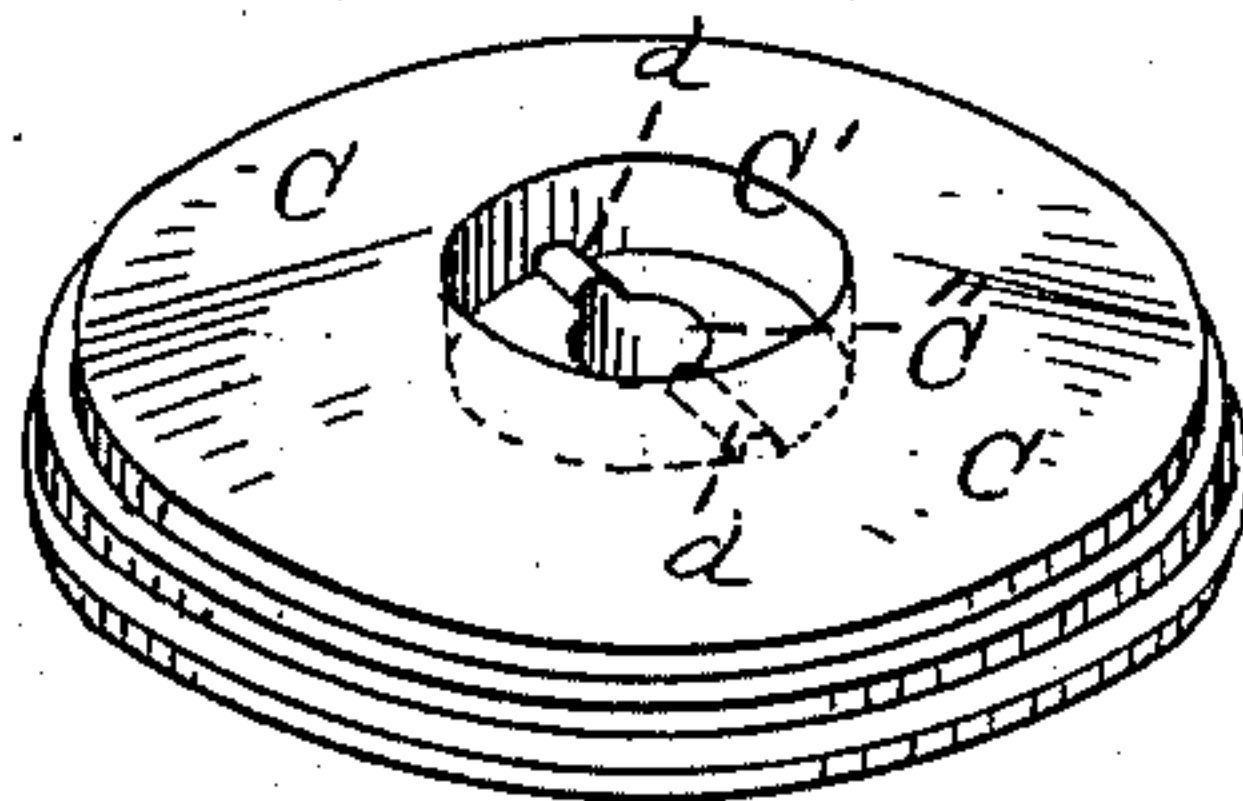


Fig. 5.

WITNESSES.

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WILLIAM A. CAREY, OF MALDEN, MASSACHUSETTS.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 385,040, dated June 26, 1888.

Application filed September 8, 1887. Serial No. 249,088. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. CAREY, of Malden, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Lubricators, of which the following is a specification.

This invention is an improved lubricator or oil-cup, whereby oil may be applied to bearings and its flow regulated.

10 In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a vertical section of my device with the valve-stem raised. Fig. 2 is a vertical section of the upper portions with the valve-stem represented as broken off. Fig. 3 is a vertical section of the device with the valve-stem down and the stopper removed. Fig. 4 is a view of the cap removed. Fig. 5 is a perspective view of the reservoir cover removed.

20 A represents the floor of the oil-reservoir, A' a hexagonal portion adapted for the application of the wrench, and A'' a threaded portion adapted to be screwed to the cap of a journal-box or in any desired position relative to a bearing.

The above parts are all integral and provided with the central vertical passage, *a*, for the oil.

30 B is a transparent tube forming the sides of the reservoir and provided at the top and bottom with suitable packing-rings, *b* and *b'*, and C is the cover. An internally-threaded tube, D, extends centrally down from the cover C and screws upon an externally-threaded tube, E, extending up centrally from the floor or base A, said tube being provided with perforations E', whereby the oil from the reservoir has access to the passage *a*. The cover C is provided with a circular central depression, C', on its upper side, and in the center of the depression with a perforation, C'', while extending from the perforation C'', along the bottom of the depression to its circumference, are two teats or beads, each on a line with the other, as shown in Fig. 5.

45 H is a tubular cap, threaded internally and provided with the serrated rim or flange H'. The bottom of this tubular cap (see Fig. 4) is provided with four radial grooves—viz., the two opposite grooves, *h h*, which are not so deep as the teats *d d* are thick, and the two

opposite grooves, *k k*, which are as deep as or deeper than the said teats are thick. The grooves *k* and *h* are at right angles with each other.

55 I is a tubular valve-stem, its lower end terminating in a valve, I', its upper end provided with a serrated flange, I'', and threaded externally so as to screw into the tubular cap H. The tubular portion of the valve-stem is perforated at *e e*, in order to allow the oil to pass into the tube E. A spiral spring, J, surrounds the valve-stem and is compressed between the cover C and an annular flange, *g*, on the valve-stem.

65 L is a check-nut running on the valve-stem, and P is a stopple provided with the head P', lying in the tubular valve-stem.

To supply the reservoir, lift out the stopper P, and the oil will flow through the tubular valve-stem I, the passages *e e*, the tube E, and the passages E' E' into the reservoir. When the valve I' is on its seat, as in Fig. 3, of course no oil can enter the passage *a*, which leads to the bearing. When the valve is in the position shown in Fig. 3, the grooves *k k* are directly over or coincident with the teats *d d*, the bottom of the tubular cap H resting on the floor of the depression C', and the valve I is forced upon its seat by the spring J, which lies between the flange *g* on the valve-stem and the cover C. Now if the cap H be rotated by means of its serrated flange until the grooves *h h* are coincident with the teats *d d* the valve will be raised from its seat (said grooves being shallower, as above explained) and the oil allowed to drip into the passage *a*. (See Fig. 1.) By turning the valve-stem in the cap the amount of drip may be exactly regulated, so that the grooves *h h* may be used to supply oil, the grooves *k k* to shut it off, or the bottom of the cap lifted upon the teats *d d* to flood the bearing. The check-nut L holds the valve-stem and cap relatively in any desired position and prevents the former from rotating independently of the latter. As the sides of the stopper P are plain and not, as is usually the case, threaded, said stopple is easily and quickly removed when it is desired to replenish the reservoir, and owing to its unusual length is not liable to drop out.

Having thus fully described my invention,

what I claim, and desire to secure by Letters Patent, is—

1. In a lubricator, the combination, with a reservoir and a valve held normally therein
5 on its seat, of the reservoir-cover C, provided with the central depression, C', surrounding the perforation C'', said depression being provided on its bottom with the perpendicular radial teats or beads *d*, and the cap H, provided
10 on its under side with the radial grooves *h*, of less depth than the thickness of said teats or beads, and the radial grooves *k*, of as great as or greater depth than said teats or beads, said cap being adapted by rotation to raise said
15 valve-stem and allow the lubricant to escape from the reservoir, substantially as and for the purpose set forth.

2. The combination of the reservoir, consist-

ing of the base A, provided with the passage *a*, tube E, and passages E', sides B and cover 20 C, provided with the tube D, depression C', perforation C'', and teats *d d*, the tubular cap H H', provided on its under side with the radial grooves *h h k k*, the two former being of less depth, and the two latter of as great or greater 25 depth than the thickness of said teats, and the tubular valve-stem I, held normally down upon its seat, so as to close said passage *a*, and provided with the perforations *e e*, said valve-stem being held by a check-nut, so as to move 30 with the said cap as the latter rotates and rises, substantially as and for the purpose described.

WILLIAM A. CAREY.

Witnesses:

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W. A. CAREY, Jr.